NEW CARWASH BUILDING FOR:

TUNNEL VISION CAR WASH

20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

STATE OF MISSOURI
JAMES DAVID BRYANT JR
ARCHITECT
05.03.2023

MODERNWASH
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BOWLING GREEN, KY 42104
OFFICE - 1.800.511.7208

MODEL:
AXIOM BETA RETAIL TOWER 2023

PLOT DATE: Friday, June 9, 2023

CONTACT US

PLEASE CONTACT MODERNWASH WITH QUESTIONS ABOUT THESE DRAWINGS, MATERIAL DELIVERY, FRAME ERECTION, AND/OR MATERIAL INSTALLATION.

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THESE DRAWINGS HAVE BEEN REVIEWED AND APPROVED ON THIS DATE OF _____. I UNDERSTAND MATERIALS WILL BE ORDERED BASED ON THIS SET OF DRAWINGS AND THAT CHANGES OR MODIFICATIONS AFTER THIS DATE WILL CONSTITUTE ADDITIONAL FEES BASED ON SAID CHANGE.

INITIALS: _____

SIGNATURE: _____

DATE: _____

NOTE:
RENDERINGS ARE FOR REFERENCE ONLY. DESIGN MAY VARY. CONFIRM ALL DESIGN DETAILS WITH DRAWINGS.

11/27/22

MODERNWASH DRAWING INDEX

			Rev ID
GENERAL INFO			
	MW-0.1	COVER SHEET	1
	MW-0.2	NOTES & ABBREVIATIONS	0
	MW-0.3	GENERAL INFORMATION	0
	MW-0.4	GENERAL INFORMATION	0
	MW-0.5	SITE PLAN	1
	MW-0.6	LIFE SAFETY PLAN	0
FLOOR PLANS			
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	MW-1.2	2nd FLOOR PLAN	0
	MW-1.3	ROOF PLAN	1
	MW-1.4	ROOF PANEL CUTSHEETS	0
	MW-1.5	LGM WALL PLACEMENT	0
REFLECTED CEILING PLANS			
	MW-2.1	REFLECTED CEILING PLANS	0
ENLARGED PLANS			
	MW-3.1	ENLARGED PLANS	0
	MW-3.2	ENLARGED PLANS	0
ELEVATIONS			
	MW-4.1	ELEVATIONS	1
SECTIONS			
	MW-5.1	SECTIONS	0
	MW-5.2	SECTIONS	0
	MW-5.3	SECTIONS	0
	MW-5.4	SECTIONS	0
DETAILS			
	MW-6.1	WALL TYPES	0
	MW-6.2	WALL/SLAB TYPES	1
	MW-6.3	2D/3D DETAILS	1
	MW-6.4	2D/3D DETAILS	0
	MW-6.5	2D/3D DETAILS	1
	MW-6.6	2D/3D DETAILS	0
	MW-6.7	EIFS DETAILS	0
	MW-6.8	STAIR DETAILS	0
	MW-6.9	PVC DETAILS	0
	MW-6.10	3D PVC & LGM DETAILS	0
	MW-6.11	CRICKET DETAILS	0
SCHEDULES			
	MW-7.1	SCHEDULES	0
	MW-7.2	MATERIAL SPECS	0
	MW-7.3	MATERIAL SPECS	0
	MW-7.4	MATERIAL SPECS	0
OTHER			
	MW-9.1	FLASHING/TRIM	0
	MW-9.2	EIFS GRID LAYOUT	0
	MW-9.3	EIFS GRID LAYOUT	0
	MW-9.4	EQUIP.GRATING & TRASH ENCLOSURE	1
	MW-9.5	SIGNAGE	1

STRUCTURAL SHEET INDEX

			REV ID
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	S-1.1	SLAB & TRENCH PLAN	
	S-1.2	LGM 2ND FLOOR FRAMING PLAN	
DETAILS			
	S-2.0	STRUCTURAL DETAILS	
	S-2.1	STRUCTURAL DETAILS	
	S-2.2	STRUCTURAL DETAILS	
	S-2.3	STRUCTURAL DETAILS	
STEEL FRAME			
	S-3.0	COLUMN BASE PLATE & DETAILS	
	S-3.1	COLUMN LAYOUT PLAN	
	S-3.2	STEEL FRAMING PLAN	
	S-3.3	STEEL FRAMING PLAN	
	S-3.4	FRAMING SECTIONS	
	S-3.5	FRAMING SECTIONS	
	S-3.6	FRAMING SECTIONS	
	S-3.7	FRAMING DETAILS	

MEP SHEET INDEX

			REV ID
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	M-0.2	MECHANICAL SCHEDULES	
MECHANICAL PLANS			
	M-1.0	MECHANICAL PLAN	
ELECTRICAL GENERAL			
	E-0.1	ELECTRICAL NOTES & DETAILS	
	E-0.2	EQUIPMENT SCHEDULES	
	E-0.3	ELECTRICAL EQUIP. SCHEDULE	
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	E-1.1	POWER PLAN - BUILDING	
	E-1.2	EQUIPMENT LAYOUT	
	E-1.3	POWER PLAN - EQUIPMENT (24V-208V)	
	E-1.4	POWER PLAN - EQUIPMENT (480V)	
	E-1.5	POWER PLAN - EQUIPMENT O.H. & U.G.	
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	P-0.3	WATER EQUIPMENT SCHEDULE	
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PLUMBING PLANS			
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	P-1.1	DWV & CHASE PLAN	
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	P-1.3	DWV RISER DIAGRAM	

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A. MODERNWASH - GENERAL NOTES:

- THESE NOTES ARE INTENDED AS ADDITIONAL INSTRUCTION TO THE DRAWINGS AND SPECIFICATIONS, AND ARE NOT ALL INCLUSIVE.
- SOME ITEMS LISTED BELOW MAY NOT APPLY TO THIS PROJECT.

1. **MODERNWASH DOCUMENTS INCLUDE:**
   A. THE MW DRAWING SET,
   B. STAMPED STEEL FRAME ENGINEERING, AND
   C. STAMPED FRAME INSTALL GUIDE.
   D. SEE FRAME ENGINEERING FOR ALL COLUMN REACTIONS/LOADING.

2. ITEMS/MATERIALS NOT SUPPLIED BY MODERNWASH INCLUDE:
   A. STAMPED ARCHITECTURAL DRAWINGS **
   B. CIVIL AND/OR LANDSCAPE ARCHITECTURAL DRAWINGS
   C. STAMPED ENGINEERING DRAWINGS ** INCLUDING - SLAB/FOUNDATION, LIGHT GAUGE METAL (LGM) FRAMING, MECHANICAL, ELECTRICAL, & PLUMBING DRAWINGS
   D. ALUMINUM STOREFRONT FRAMES & GLAZING
   E. ALUMINUM STOREFRONT DOORS
   F. WOOD &/OR HOLLOW METAL DOORS
   G. OVERHEAD &/OR ROLLUP DOORS **
   H. CABINETRY/CASEWORK **
   I. BLOCKING, SHEATHING, &/OR DECKING (M-BOARD **)
   J. INSULATION - INCLUDING RIGID, MINERAL BATT, FIBERGLASS, ETC.
   K. DRYWALL/GYPSUM WALL BOARD FINISHES - TAPE, TEXTURE, MUD, SMOOTH, FINISH
   L. FLOOR COVERINGS/FINISHES - WALL BASE & MOLDINGS
   M. CONCRETE &/OR CONCRETE BLOCK (CMU)
   N. PLUMBING FIXTURES & TOILET ROOM ACCESSORIES
   O. MECHANICAL EQUIPMENT
   P. CAR WASH EQUIPMENT DRAWINGS OR EQUIPMENT **
   Q. VAPOR BARRIER
   R. PAINT & FINISHES

ERECTION AND INSTALLATION BY OTHERS

** DENOTES ITEMS THAT CAN BE SUPPLIED BY MODERNWASH. CONTACT MODERNWASH TO REQUEST OPTIONS &/OR A QUOTE.

3. THESE MODERNWASH DRAWINGS, INCLUDING THE MATERIAL TAKEOFF LIST, ARE TO BE USED ONLY FOR THE ADDRESS LISTED ON THE TITLE BLOCK. THE USE OF THESE DRAWINGS FOR ANY OTHER LOCATION IS STRICTLY PROHIBITED. THE CONTRACTOR AND/OR OWNER IS ONLY TO USE THESE DRAWINGS FOR INSTALLATION OF THE MODERNWASH PACKAGE/KIT AND ARE NOT TO BE USED TO PRICE MATERIALS PROVIDED BY MODERNWASH. USE OF THESE DRAWINGS IN A MANOR OTHER THAN INTENDED WILL RESULT IN LEGAL ACTION BY MODERNWASH.
4. THESE DRAWINGS AND ANY SUPPLEMENTAL DRAWINGS OR DOCUMENTS ARE THE PROPERTY OF AND REMAIN THE PROPERTY OF MODERNWASH PRIOR TO, DURING AND AFTER CONSTRUCTION. RECEIPT OF ANY OF THESE DOCUMENTS DOES NOT TRANSFER OWNERSHIP.
5. QR (QUICK RESPONSE) CODES ARE UTILIZED IN MODERNWASH DRAWING SET TO SUPPLY INFORMATION OR LINKS TO INFORMATION. THIS INCLUDES BUT IS NOT LIMITED TO CONTACT INFORMATION, WEB LINKS, LINKS TO CURRENT DRAWINGS. QR READER APS (APPLICATIONS) ARE AVAILABLE FOR SMART PHONES AND/OR OTHER MOBILE DEVICES.
6. DRAWINGS TO BE DISTRIBUTED ONLY IN FULL SETS. DISTRIBUTION OF INDIVIDUAL SHEETS OR PARTIAL SETS IS NOT PERMITTED.
7. DRAWINGS ARE FORMATTED TO 24X36 (ARCH D SHEET) PRINTED AT A SCALE OF 100%. PRINTING IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR AND MODERNWASH RECOMMENDS PRINTING AT FULL SIZE.
8. IF MATERIAL OR DESIGN CHANGES ARE REQUIRED THAT DEVIATE FROM THESE CONSTRUCTION DOCUMENTS, THEN IT IS THE RESPONSIBILITY OF THE ARCHITECT, OWNER, AND/OR GENERAL CONTRACTOR, TO NOTIFY MODERNWASH. THIS INCLUDES, BUT IS NOT LIMITED TO LGM STUD SIZE/LOCATION, INSULATION REQUIREMENTS, FINISH TYPE/COLOR, ETC.
9. COLOR CONFIRMATION: WHEN PROJECT IS ORDERED AND PLACED ON THE FABRICATION SCHEDULE MODERNWASH GENERATES AND SENDS A COLOR CONFIRMATION SHEET TO BE SIGNED BY THE OWNER APPROVING COLORS AS DESIGNED. MATERIALS AFFECTED BY THE CONFIRMATION SHEET WILL NOT BE ORDERED OR FABRICATED UNTIL SIGNED AND RETURNED TO MODERNWASH.
10. MODERNWASH MAY LIST ANY AND ALL MATERIALS SHOWN IN THE RENDERS/BUILDING MODEL. THIS HELPS TO CLARIFY WITH OWNER AND/OR DESIGN REVIEW BOARD. LISTING THE MATERIALS NOT IN THE MODERNWASH SCOPE DOES NOT CONFIRM THE MATERIAL IS SUPPLIED BY MODERNWASH. SEE SCOPE/QUOTE ON OR AFTER RELEASE FOR PRODUCTION/FABRICATION.
11. IBC CONSTRUCTION CLASSIFICATION FOR A TYPICAL MODERNWASH BUILDING IS TYPE 5B (IF MAX HEIGHT IS 40' OR LESS, 2 STORIES OR LESS ABOVE GRADE, AND MAXIMUM OF 9,000 SF PER FLOOR WITH NO AUTOMATIC FIRE SUPPRESSION)
12. QUESTIONS ABOUT OR CLARIFICATIONS TO THE DOCUMENTS FROM THE GC SHALL BE **SUBMITTED IN WRITING** TO MODERNWASH AND/OR THE ARCHITECT FOR REVIEW AND WRITTEN RESPONSE. GC SHALL USE **MODERNWASH RFI FORM** (REQUEST FOR INFORMATION) FOR PROJECT RELATED QUESTIONS AND/OR CLARIFICATIONS.
13. DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE IN QUESTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATION FROM MODERNWASH VIA **MODERNWASH RFI** BEFORE PROCEEDING.
14. MODERNWASH SHALL BE NOTIFIED IMMEDIATELY FOR ANY CONFLICT IN THE CONSTRUCTION DOCUMENTS.
15. A REPRESENTATIVE FROM MODERNWASH CAN BE SCHEDULED TO MAKE A SITE VISIT (POSSIBLE ADDITIONAL CHARGES) TO REVIEW INSTALLATION PROCEDURES AND OTHER CONTRACTOR QUESTIONS WITH THE GENERAL CONTRACTOR AND/OR SUBCONTRACTORS. A SITE VISIT CAN INCLUDE, BUT ARE NOT LIMITED TO: PRE-CONSTRUCTION MEETING, CONSTRUCTION DOCUMENT REVIEW, CONSTRUCTION SEQUENCE/SCHEDULE, THE GENERAL CONTRACTOR AND/OR OWNER IS TO CONTACT MODERNWASH TO SCHEDULE SAID VISIT. ADDITIONAL VISITS AS REQUESTED ARE TO BE COORDINATED WITH MODERNWASH FOR SCHEDULING AND ANY ADDITIONAL FEES.
16. ANY AND ALL DEVIATIONS FROM THE PERMITTED CONSTRUCTION DOCUMENTS MADE AFTER PERMITTING ARE TO BE COORDINATED WITH MODERNWASH AND/OR THE ARCHITECT. CHANGES MADE DURING CONSTRUCTION AS DIRECTED BY OWNER AND/OR CONTRACTOR THAT VARY FROM THE PERMITTED CONSTRUCTION DOCUMENTS AND ARE NOT CONFIRMED WITH MODERNWASH AND/OR THE ARCHITECT BECOME THE RESPONSIBILITY OF THE OWNER AND/OR CONTRACTOR.

B. NOTES FOR GC - GENERAL CONTRACTOR:

1. COORDINATION OF THE VARIOUS TRADES WITH RESPECT TO THESE DOCUMENTS IS THE RESPONSIBILITY OF THE CONTRACTOR.
2. GENERAL CONTRACTOR AND SUBS ARE RESPONSIBLE FOR COORDINATING WORK WITH ALL CONSTRUCTION DOCUMENTS. ANY CONSTRUCTION ACTIVITIES PERFORMED THAT ARE NOT DESCRIBED IN CONSTRUCTION DOCUMENTS BECOME THE RESPONSIBILITY OF SAID CONTRACTOR OR SUB.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR(S) TO VERIFY ALL FIELD CONDITIONS PRIOR TO SUBMITTING PROJECT BIDS, ORDERING MATERIALS, GENERATING SHOP DRAWINGS AND SUBMITTALS, AND START OF WORK. THE ARCHITECT AND/OR MODERNWASH SHALL NOT BE HELD LIABLE FOR UN-VERIFIED FIELD CONDITIONS.
4. CONTRACTOR & SUBS ARE RESPONSIBLE FOR CONFIRMING WITH MODERNWASH & EQUIPMENT SUPPLIER THAT THEY HAVE THE LATEST SET OF CONSTRUCTION DOCUMENTS, PRIOR TO START OF PROJECT.
5. WORK PERFORMED FROM THESE PLANS PRIOR TO ALL CODE AND ZONING APPROVALS IS AT THE RISK AND RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER.
6. CONTRACTORS SHALL WARRANT THEIR RESPECTIVE CONSTRUCTION AND WORK TO BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF ALL LOCAL, STATE, AND FEDERAL LAWS, AUTHORITIES HAVING JURISDICTION, AND MANUFACTURER'S INSTALLATION AND WARRANTY REQUIREMENTS.
7. CONTRACTORS SHALL PROVIDE ALL REQUIRED LABOR AND MATERIALS TO ACHIEVE INDUSTRY STANDARD OF MEANS AND METHODS TO ACHIEVE THE DESIGN INTENT OF THE CONTRACT DOCUMENTS REGARDLESS WHETHER OR NOT DOCUMENTED HEREIN; CONSIDERATIONS FOR ADDITIONAL LABOR OR MATERIAL COST ON THE BASIS OF OMISSIONS SHALL NOT BE GRANTED.
8. CONTRACTOR TO PROVIDE AND INSTALL EXIT SIGNAGE AND/OR LIGHTING IN ACCORDANCE TO THE CURRENT INTERNATIONAL BUILDING CODE (IBC) OR LOCAL BUILDING CODE.
9. CONTRACTOR TO PROVIDE AND INSTALL FIRE EXTINGUISHERS IN ACCORDANCE TO CURRENT IBC, IFC, OR LOCAL CODE.
10. GC TO COORDINATE LOCATIONS OF FIRE EXTINGUISHERS AND SEMI-RECESSED WALL CABINETS DESIGNATED AS FE (BRACKET EXTINGUISHER) OR FEC (EXTINGUISHER IN CABINET) WITH THE LOCAL FIRE MARSHAL. (**SUPPLIED BY OTHERS**).
11. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INVENTORY MATERIALS WITHIN 72 HOURS OF DELIVERY TO THE JOB SITE. ITEMS DELIVERED INCLUDE A PACKING LIST AND SHOULD BE CHECKED FOR QUANTITY AND SHIPPING RELATED DAMAGE. CONTRACTOR IS TO CONTACT MODERNWASH IN WRITING WITH ANY MISSING OR DAMAGED ITEMS WITHIN 72 HOURS. AFTER 72 HOURS ALL MATERIALS OR ALL MATERIALS NOT INCLUDED IN A SUBMITTED REQUEST ARE

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ASSUMED TO BE ON SITE AND UNDAMAGED. ITEMS REQUESTED AFTER 72 HOURS ARE TO BE QUOTED BY MODERNWASH FOR MATERIAL AND SHIPPING CHARGES.

12. UPON RECEIVING DELIVERY OF MATERIALS SUPPLIED BY MODERNWASH TO THE SITE, SAID MATERIALS BECOME THE RESPONSIBILITY OF THE CONTRACTOR. STORAGE, HANDLING, INSTALLATION, AND ANY DAMAGES ARE THE RESPONSIBILITY OF THE CONTRACTOR/OWNER.
13. BUILDING ERECTION - THE CONTRACTOR IS RESPONSIBLE FOR ALL ERECTION OF THE STEEL AND ASSOCIATED WORK IN COMPLIANCE WITH THE STEEL FRAME ENGINEERING. SEE STEEL FRAME INSTALLATION/ERECTION NOTES.
14. PLACEMENT OF LGM WALL FRAMING IS TO BE DONE BASED ON THESE DRAWINGS. IF LOCATION IS IN QUESTION CONTACT MODERNWASH. VARIATION OF LGM PLACEMENT MAY EFFECT FINISH MATERIAL, TRIMS, ETC., AND BECOMES THE RESPONSIBILITY OF THE CONTRACTOR/OWNER.
15. IT IS THE CONTRACTORS RESPONSIBILITY TO REFER TO AND FOLLOW THE MANUFACTURERS SPECIFICATIONS FOR EACH MATERIAL INSTALLATION REQUIREMENTS AND PROCEDURES. MODERNWASH PROHIBITS INSTALLATION OF MATERIALS IN TEMPERATURES AT OR BELOW 32°F.
16. SOME MATERIALS ARE SHIPPED/DELIVERED WITH A PROTECTIVE FILM. THESE INCLUDE, BUT ARE NOT LIMITED TO: ACM PANEL, TRIMS/FLASHINGS, METAL WALL/ROOF PANELS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE THE PROTECTIVE FILM DURING INSTALLATION OF SAID PANEL OR SHORTLY THEREAFTER.
17. IF PLYWOOD OR ZIP SHEATHING IS SUBSTITUTED WITH ANOTHER SHEATHING PRODUCT, THEN THE CONTRACTOR IS RESPONSIBLE FOR THE POSSIBLE CHANGE OR MODIFICATION OF THE FINISH MATERIAL ATTACHMENT TO THE SUBSTRATE.
18. WINDOW/DOOR AND ALL WALL/ROOF PENETRATIONS ARE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR/SUB TO WATER TIGHT/SEAL AND FLASH. USE INDUSTRY STANDARD AND BEST PRACTICE.
19. CONTRACTOR AND/OR OWNER IS TO KEEP MODERNWASH INFORMED OF SCHEDULING AND PROGRESS ON SITE. THESE PARTIES ARE ALSO REQUIRED TO PROVIDE PROGRESS PHOTOS THROUGHOUT CONSTRUCTION STARTING WHEN BREAKING GROUND (PREFERABLY WEEKLY UPDATES). MODERNWASH HAS THE AUTHORITY TO SCHEDULE SHIPMENTS BASED ON COMPLETION ON SITE.

C. NOTES PERTAINING TO MATERIALS:

1. SPECIFIED MATERIALS SHOWN IN DRAWINGS **SUPPLIED BY MODERNWASH** MAY BE SUBSTITUTED **BY MODERNWASH** FOR ANOTHER MANUFACTURER'S MATERIAL OF SIMILAR TYPE AND SPECIFICATION BASED ON AVAILABILITY, DELIVERY SCHEDULE, COLORS AVAILABILITY, ETC. - OTHER MATERIALS CAN BE SUBSTITUTED BASED ON **ARCHITECT/OWNER APPROVAL**.
2. MATERIALS BY OTHERS - ALL INTERFACE AND COMPATIBILITY OF ANY MATERIALS NOT FURNISHED BY MODERNWASH ARE THE RESPONSIBILITY OF AND TO BE COORDINATED BY THE GENERAL CONTRACTOR AND/OR ARCHITECT. UNLESS SPECIFIC DESIGN CRITERIA CONCERNING ANY INTERFACE BETWEEN MATERIALS IF FURNISHED AS A PART OF THE ORDER DOCUMENTS, MODERNWASH'S ASSUMPTIONS WILL GOVERN.
3. CONTRACTOR IS TO INFORM MODERNWASH WHEN ANCHOR BOLTS ARE NEEDED ON SITE. MODERNWASH REQUIRES A 2 WEEK NOTICE MINIMUM AND SHIPPING ADDRESS. SLAB AND FOUNDATION DRAWINGS ARE TO BE **DESIGNED BY OTHERS**. MODERNWASH'S FRAME INSTALL GUIDE SHOWS ANCHOR BOLT SIZES BASED ON THE FRAME REACTIONS. ARCHITECT, OWNER, AND/OR CONTRACTOR ARE RESPONSIBLE FOR INFORMING MODERNWASH IF THE SIZE OR TYPE OF ANCHOR BOLTS CHANGES FROM WHAT IS SHOWN IN THE STEEL FRAME INSTALL GUIDE BASED ON THE SLAB AND FOUNDATION ENGINEERING.
   3.1. CONTRACTOR IS RESPONSIBLE FOR ANCHOR BOLT INSTALLATION PROCESS AND PLACEMENT AS LOCATED IN THE STRUCTURAL DESIGN DOCUMENTS. IF BOLT SIZE AND/OR PLACEMENT IS IN QUESTION PLEASE CONTACT MODERNWASH FOR CLARIFICATION.
4. TUBULAR STEEL FRAME IS DELIVERED TO THE SITE FINISHED WITH A FACTORY APPLIED POWDER COAT. PAINT TOUCH UP KIT IS SUPPLIED WITH THE BUILDING IN CASE OF ANY DAMAGES. CONTRACTOR IS TO USE STANDARD OF CARE WHEN UNLOADING AND TO HAVE ADEQUATE AREA FOR STORAGE AND STAGING OF PARTS ON SITE AS REQUIRED. THE SYSTEM IS BOLT-TOGETHER AND MODERNWASH RECOMMENDS THE USE OF A TELEHANDLER AND SCISSOR LIFT FOR INSTALLATION OF THE BUILDING FRAME.
   4.1. ***A CRANE IS NOT RECOMMENDED BY MODERNWASH AS IT MAKES INSTALLATION MORE DIFFICULT, HOWEVER A CRANE CAN BE USED AND MAY BE REQUIRED BASED ON SITE ALLOWANCES.***
5. TIGHTENING OF THE TUBULAR STEEL FRAME'S BOLTS IS TO BE DONE TO THE "**TURN-OF-BOLT**" METHOD AS DESCRIBED BELOW. A BOLT INSPECTION IS REQUIRED BY A ICC CERTIFIED BOLT INSPECTOR. COORDINATE INSPECTION & TIGHTENING WITH SAID INSPECTOR. SEE DESCRIPTION OF "TURN-OF-BOLT" METHOD AT THE END OF GENERAL NOTES.
6. SEE WINDOW AND DOOR SCHEDULES ON MW-7 SERIES SHEETS
7. SEE WALL, SLAB, AND FLOOR DETAILS ON MW-6 SERIES SHEETS
8. RESTROOM ELEVATIONS ARE TYPICAL. LOCATION OF ENTRY/EXIT DOOR MAY VARY. SEE FLOOR PLAN FOR ACTUAL DOOR LOCATION AND ACTUAL ROOM SIZE. INTERIOR WALL FINISH MAY VARY (**CONFIRM WITH OWNER**).
9. LIGHT GAUGE METAL (LGM) STUD FOR ALL PARTITIONS ARE TO BE 18 GAUGE - 16" ON CENTER - UNLESS NOTED OTHERWISE (STUD SIZE MAY VARY - SEE DRAWINGS) (**SUPPLIED BY MODERNWASH**).
10. LIGHT GAUGE METAL (LGM) CEILING JOISTS TO BE 8" - 18 GAUGE - 12" ON CENTER - SUPPORTED BY 8" TRACK (**SUPPLIED BY MODERNWASH**). BLOCKING AS REQUIRED, GWB, SHEATHING/DECKING, AND FINISH (**SUPPLIED BY OTHERS**).
11. LIGHT GAUGE METAL (LGM) FLOOR JOISTS TO BE 12" - 12 GAUGE - 12" ON CENTER - SUPPORTED BY SIMPSON STRONG-TIE JOIST HANGERS - UNLESS NOTED OTHERWISE (**SUPPLIED BY MODERNWASH**). BLOCKING AS REQUIRED, GWB, SHEATHING/DECKING, AND FINISH (**SUPPLIED BY OTHERS**).
12. PLACEMENT OF LGM WALL FRAMING IS TO BE DONE BASED ON THESE DRAWINGS. IF LOCATION IS IN QUESTION CONTACT MODERNWASH. VARIATION OF LGM PLACEMENT MAY EFFECT FINISH MATERIAL, TRIMS, ETC., AND BECOMES THE RESPONSIBILITY OF THE CONTRACTOR/OWNER.
13. MODERNWASH SUPPLIES A MATERIAL TAKEOFF LIST SPECIFYING MATERIAL SUPPLIED (SIZE IF APPLICABLE) AND LOCATION OF INSTALLATION. MATERIALS CUT INAPPROPRIATELY OR USED AT THE WRONG LOCATION IS THE RESPONSIBILITY OF THE CONTRACTOR AND MODERNWASH IS NOT RESPONSIBLE FOR COST OF REPLACEMENT MATERIAL INCLUDING SHIPPING. DELAY ON SITE AND ANY COST ASSOCIATED IS NOT THE RESPONSIBILITY OF MODERNWASH.
14. ROUGH OPENING FOR PTAC UNITS IS 42 1/4" X 16 1/4" UNLESS NOTED OTHERWISE - **IF SUPPLIED BY MODERNWASH**.
15. MINERAL BATT INSULATION SHOWN IN ALL WALL AND FLOOR LOCATIONS WITH GWB FINISH. ACTUAL LOCATIONS MAY VARY AS REQUIRED. CONFIRM WITH LOCAL BUILDING CODE (**SUPPLIED BY OTHERS**).
16. PVC PANEL FINISH INTERIOR OF WASH BAY - **SUPPLIED BY MODERNWASH**. IF POSSIBLE, AVOID INSTALLATION OF PANELS WHEN THE TEMPERATURE IS BELOW 10 DEGREES C (50 DEGREES F). ALLOW PANELS TO ACCLIMATE TO ROOM TEMPERATURE FOR AT LEAST 24 HOURS PRIOR TO INSTALLATION.
   16.1. IF INSTALLING AT A TEMPERATURE AT OR BELOW 0 DEGREES C (32 DEGREES F) INSERT A NICKEL (1.80MM / 0.07") BETWEEN PANELS DURING INSTALLATION. IF INSTALLING AT ALL TEMPERATURES ABOVE 0 DEGREES C (32 DEGREES F) INSERT A DIME (1.35MM/ 0.053") BETWEEN PANELS.
   16.2. PLACE/INSTALL BUT, DO NOT MECHANICALLY FASTEN THE TOP HORIZONTAL PVC J-TRIM AT THE TOP OF WALLS. PVC EXPANDS AND CONTRACTS DUE TO TEMPERATURE AND MECHANICALLY FASTENING THE TOP J-TRIM CAN CAUSE THE PANELS TO BUCKEL IN EXTREME TEMPERATURES
17. IT IS THE CONTRACTORS RESPONSIBILITY TO REFER TO AND FOLLOW THE MANUFACTURERS SPECIFICATIONS FOR EACH MATERIAL INSTALLATION REQUIREMENTS AND PROCEDURES. MODERNWASH PROHIBITS INSTALLATION OF MATERIALS IN TEMPERATURES AT OR BELOW 32°F.
18. SOME MATERIALS ARE SHIPPED/DELIVERED WITH A PROTECTIVE FILM. THESE INCLUDE, BUT ARE NOT LIMITED TO: ACM PANEL, TRIMS/FLASHINGS, METAL WALL/ROOF PANELS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE THE PROTECTIVE FILM DURING INSTALLATION OF SAID PANEL OR SHORTLY THEREAFTER.
19. LINER PANEL (IF QUOTED) IS MCELROY METAL - MATRIX PANEL. INSTALL HORIZONTALLY DIRECTLY TO LGM STUDS. SUBSTRATE MAY BE USED AS REQUIRED. WHEN ATTACHING EQUIPMENT SCREW AT VALLEY OF PANEL (**SUPPLIED BY MODERNWASH**).
20. UNISTRUT MAY BE USED AS REQUIRED BOTH HORIZONTALLY AND VERTICALLY TO SUPPORT EQUIPMENT (**SUPPLIED BY OTHERS**). SCREW AT VALLEY OF LINER PANEL IF USED AT WALL STUD LOCATION.
21. LIGHTS/MECHANICAL EQUIPMENT ARE **NOT** TO BE SECURED TO FLOOR/ROOF DECKING. MOUNTING TO BE DONE BY THE USE OF UNISTRUT AND THREADED ROD SECURED TO ROOF/FLOOR JOISTS OR STEEL FRAME AS REQUIRED (**SUPPLIED BY OTHERS**).

22. POLYCARBONATE ROOF PANELS ARE DELIVERED IN AN ENCLOSED TRUCK. THESE ARE STRAPPED INSIDE TO PREVENT MOVEMENT AND DAMAGE DURING SHIPPING. THE ROOF PANELS MUST BE UNLOADED BY HAND. UNLOADING OR MOVING BY OTHER MEANS MAY CAUSE DAMAGE WHICH BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
23. ALL ALUMINUM STOREFRONT (ASF) FRAMES, GLASS, AND DOORS **SUPPLIED BY OTHERS**. ALL STOREFRONT DIMENSIONS IN DRAWINGS DENOTE ROUGH OPENINGS. PROVIDE ALUMINUM BASE FLASHING AT ALL WALL OPENINGS (**SUPPLIED BY OTHERS**).
24. ALUMINUM COMPOSITE METAL PANEL (ACM) WITH PVC BACKER (**SUPPLIED BY MODERNWASH**) LOCATED IN ASF FRAMES (**SUPPLIED BY OTHERS**) - CUT TO FIT ON SITE.
25. LEXAN THERMOCLEAR POLYCARBONATE PANELS (**SUPPLIED BY MODERNWASH**) LOCATED IN ASF FRAME (**SUPPLIED BY OTHERS**) - 10MM THICKNESS UNLESS NOTED OTHERWISE - CUT TO FIT ON SITE.
26. PLYWOOD OR ZIP PANEL SHEATHING (**SUPPLIED BY OTHERS**) NOTED IN THE DRAWINGS MAY BE SUBSTITUTED WITH OTHER MATERIALS SUCH AS OSB, DENSGLASS, OR HAT CHANNEL AS REQUIRED OR ALLOWED BY LOCAL BUILDING CODE (CONFIRM WITH ARCHITECT PRIOR TO MODIFICATION)
27. IF PLYWOOD OR ZIP SHEATHING IS SUBSTITUTED WITH ANOTHER SHEATHING PRODUCT, THEN THE CONTRACTOR IS RESPONSIBLE FOR THE POSSIBLE CHANGE OR MODIFICATION OF THE FINISH MATERIAL ATTACHMENT TO THE SUBSTRATE.
28. VAPOR BARRIER EITHER AS PER ZIP SHEATHING'S FACTORY APPLIED BARRIER OR CONTRACTOR APPLIED BARRIER IS TO BE TAPED/ADHERED TO STRUCTURAL STEEL AT PERIMETER OF WALL FRAMING.
29. ALL GYPSUM WALL BOARD (GWB) IS TO BE MOISTURE RESISTANT. THICKNESS OF GWB FINISH MAY BE ADJUSTED AS REQUIRED BY LOCAL BUILDING CODE. TAPE, TEXTURE, MUD, SMOOTH, FINISH (**SUPPLIED BY OTHERS**).
30. UNLESS NOTED OTHERWISE GUTTERS ARE 5" X 5" AND DOWNSPOUTS ARE 5" X 4" - LOCATIONS SHOWN ON PLAN AND ELEVATIONS (**SUPPLIED BY MODERNWASH**). DOWNSPOUTS ARE SUPPLIED STRAIGHT AND SINGLE PIECE. CONTRACTOR IS RESPONSIBLE FOR FIELD FABRICATION REQUIRED TO FIT TO BUILDING FACADE AS NEEDED.
31. THE BUILDING QUOTE PROVIDED TO THE OWNER AT THE TIME OF RELEASE FOR PRODUCTION (OR AFTER) TAKES PRIORITY OVER THE MODERNWASH DRAWINGS. AS CHANGES TAKE PLACE THROUGHOUT THE DESIGN PROCESS, MATERIALS SUPPLIED BY MODERNWASH MAY VARY FROM THESE DRAWINGS. MODERNWASH DOES ITS BEST TO MAKE SURE THE DRAWINGS AND QUOTE COORDINATE, HOWEVER SOME ADJUSTMENTS ARE DONE LAST MINUTE. SEE SCOPE/QUOTE DONE AT THE TIME OF RELEASE FOR FABRICATION/PRODUCTION.
32. NOT ALL, BUT MANY MODERNWASH STRUCTURES HAVE CONCEALED MEMBRANE ROOF SYSTEMS. THE METAL DECK SUPPLIED BY MODERNWASH IS TO BE USED AS A DECKING TO SUPPORT THE MEMBRANE ROOF SYSTEM SUPPLIED AND INSTALLED BY OTHERS. DRAINAGE OF THESE AREAS CAN BE ACHIEVED IN MULTIPLE WAYS INCLUDING, BUT NOT LIMITED TO THROUGH WALL OR INTERIOR ROUTING. THROUGH WALL CAN DRAIN ONTO AN ADJACENT ROOF OR BE CAPTURED BY A SCUPPER BOX AND DOWNSPOUT. IF RUNNING INTERIOR OF THE STRUCTURE PROPER INSULATION IS TO BE USED AND DRAIN ROUTE THROUGH INTERIOR WALLS IS PREFERRED. COORDINATE WITH CIVIL IF CONNECTING TO UNDERGROUND COLLECTION SYSTEM.
33. DOWNSPOUTS PROVIDED BY MODERNWASH CAN BE CONNECTED TO AN UNDERGROUND COLLECTION SYSTEM IF USED OR SPLASH TO GROUND. CONTRACTOR IS RESPONSIBLE FOR DIRECTING WATER AWAY FROM THE BUILDING AT ALL INSTANCES.
34. ACCESS HATCH SHOWN ON REFLECTED CEILING PLAN MAY BE SHOWN TO ALLOW ACCESS FOR MAINTENANCE AT CONCEALED SPACES. UNLESS NOTED OTHERWISE ATTIC AREAS ARE NOT INTENDED FOR STORAGE. SIZE OPENING FOR ACCESS AND POSSIBLE PULL DOWN ACCESS LADDER. CONFIRM LADDER REQUIREMENT WITH OWNER. IF REQUIRED UNIT TO BE **SUPPLIED BY OTHERS**.

D. NOTES PERTAINING TO SITE / CONCRETE:

1. MODERNWASH RECOMMEND THAT ALL SLABS FOR THE BUILDING ARE POURED PRIOR TO INSTALLING THE BUILDING FRAME. CONTRACTOR IS TO PROVIDE DIAMOND BLOCKING AT ALL COLUMN TO FOUNDATION POINTS PER THE ENGINEERING. HAVING ALL SLABS INSTALLED WILL SPEED UP THE INSTALLATION OF THE BUILDING FRAME AND OTHER COMPONENTS.
2. EQUIPMENT AND/OR CONVEYOR TRENCH SHOWN IN THESE DRAWINGS IS FOR REFERENCE ONLY. SEE EQUIPMENT PROVIDER DRAWINGS, MECHANICAL, ELECTRICAL, PLUMBING, AND/OR SLAB/FOUNDATION DRAWINGS FOR REQUIRED POSITIONING AND DETAILS.
3. THE ELEVATION OF THE EXTERIOR GRADE AND/OR CONCRETE SIDEWALK, STOOPS, ETC. MAY EFFECT FINISHES AS SUPPLIED BY MODERNWASH. CHANGES DUE TO THIS IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

E. NOTES FOR FABRICATION:

1. RARELY BUT ON OCCASION A PART MAY BE FABRICATED INCORRECTLY. AT MODERNWASH'S EXPENSE THE PART OR PARTS WILL BE REPLACED AT MODERN WASH'S DISCRETION. THE SIZE OF OR ADJUSTMENT OF THE INCORRECTLY FABRICATED PIECES IS TO BE CONFIRMED PRIOR TO RE-FABRICATION. MODERNWASH WILL REPLACE THESE MATERIALS AS QUICKLY AS POSSIBLE, BUT RESERVES THE RIGHT TO SHIP ITEMS TOGETHER AS REQUIRED. MODERNWASH IS NOT RESPONSIBLE FOR DELAYS ON SITE INCLUDING, BUT NOT LIMITED TO LABOR, EQUIPMENT RENTALS, AND/OR OTHER AFFECTED MATERIALS.
2. DUE TO THE NATURE OF THE CAR WASH TUNNEL ENVIRONMENT MODERNWASH RECOMMENDS INSTALLING THE STOREFRONT FRAMES WITH THE WEEP HOLES TO THE INTERIOR OF THE WASH BAY. WATER PROOFING OF THE STORE FRONT SYSTEM IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR.

F. STEEL FRAME INSTALLATION/ERECTION NOTES

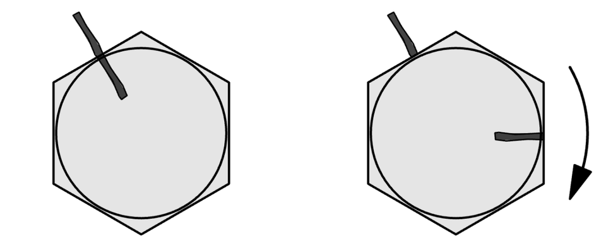
THE FOLLOWING RECOMMENDATIONS ARE BASED ON YEARS OF EXPERIENCE.

1. PROPER BRACING OF MEMBERS DURING INSTALLATION MUST BE PERFORMED UNTIL COMPLETE.
2. ALL CONSTRUCTION SHALL COMPLY FULLY WITH THE APPLICABLE PROVISIONS OF THE NATIONAL OCCUPATIONAL SAFETY AND HEALTH (OSHA) REQUIREMENTS
3. THE INSTALLATION OF THE STRUCTURE SHALL BE PERFORMED BY SOMEONE OF EXPERIENCE AND COMPETENCE. IT SHALL BE THE RESPONSIBILITY OF THE INSTALLER TO PROPERLY ASSEMBLE THE STRUCTURE AS SHOWN IN THE FRAME INSTALL GUIDE.
4. KEEP ALL BOLTED CONNECTIONS LOOSE ENOUGH DURING INSTALLATION SO THAT ADJUSTMENTS MAY BE POSSIBLE.
5. DURING THE INSTALLATION PROCESS, DO NOT CONTINUE INSTALLATION OF ADDITIONAL MEMBERS UNTIL ALL BOLTS ARE INSTALLED INTO ALL BOLT HOLES. IF ADDITIONAL MEMBERS ARE INSTALLED, INSTALLATION OF REMAINING BOLTS WILL BE DIFFICULT OR MAY NOT BE POSSIBLE WITHOUT ALTERATION TO THE STRUCTURE. CONTACT MODERNWASH IF REQUIRED.
6. ALWAYS USE THE INSTALLATION INSTRUCTIONS THAT HAVE SHIPPED WITH THE FRAMING MATERIALS AS THESE ARE THE MOST CURRENT. POSSIBLE CHANGES IN MATERIAL QUANTITIES, LENGTHS, PART LABELS, ETC. MAY HAVE BEEN NECESSARY DURING FINAL SHOP DRAWINGS, EVEN AFTER SEALED ENGINEERING.
7. ANY PROPOSED MODIFICATIONS TO THE STRUCTURE NEED TO HAVE PRIOR CONSENT FROM A LICENSED ENGINEER.
8. READ AND UNDERSTAND INSTALLATION INSTRUCTIONS THOROUGHLY BEFORE PROCEEDING WITH THE INSTALLATION PROCESS.
9. UNLESS NOTED OTHERWISE ALL BEAM OR RAFTER ACCESS HAND HOLES SHOULD BE LOCATED ON THE TOP OF THE MEMBER WHEN INSTALLED. A COVER PLATE IS NOT REQUIRED AS THEY ARE COVERED BY WALL FRAMING, STOREFRONT FRAMING, OR ROOF PANELS.
10. COLUMN ACCESS HAND HOLES SHOULD BE LOCATED ON THE SIDE OF THE MEMBER AND BE COVERED BY WALL OR STOREFRONT FRAMING. EXPOSED ACCESS HOLES IN COLUMNS WHERE NO WALL OR WINDOW FRAMING IS LOCATED, ARE TO BE COVERED WITH A COVER PLATE (**PROVIDED BY MODERNWASH**).
11. ON RARE OCCASIONS FRAMING MEMBERS MAY HAVE BEEN INCORRECTLY FABRICATED. THE CONTRACTOR IS TO NOTIFY MODERNWASH IMMEDIATELY AND PROVIDE PHOTOS AS REQUIRED. THE REPAIR OR REPLACEMENT OF SAID MEMBERS IS TO BE DONE AT THE DIRECTION/DISCRETION OF MODERNWASH.
12. TIGHTENING OF THE TUBULAR STEEL FRAME'S BOLTS IS TO BE DONE TO THE "**TURN-OF-BOLT**" METHOD AS DESCRIBED BELOW. A BOLT INSPECTION IS REQUIRED BY A ICC CERTIFIED BOLT INSPECTOR. COORDINATE INSPECTION & TIGHTENING WITH SAID INSPECTOR. SEE DESCRIPTION OF "TURN-OF-BOLT" METHOD AT THE END OF GENERAL NOTES.
13. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE BOLT TIGHTENING WITH THE INSPECTOR PRIOR TO TIGHTENING BOLTS. INDIVIDUAL BOLT INSPECTORS MAY VARY IN THEIR REQUIREMENTS AND REQUIRED SUPERVISION OF THE BOLT TIGHTENING ON SITE AND IS NOT THE RESPONSIBILITY OF MODERNWASH. MODERNWASH REQUIRES A BOLT INSPECTION TO BE COMPLETE BY A CERTIFIED BOLT INSPECTOR.
14. A COPY OF THE BOLT INSPECTION REPORT MUST BE SUPPLIED TO MODERNWASH. IF MODERNWASH DOES NOT RECEIVE THE REPORT THE WARRANTY MAY BE VOID.

G. TURN-OF-BOLT

THIS METHOD INVOLVES TIGHTENING THE FASTENER TO A LOW INITIAL "SNUG TIGHT" CONDITION AND THEN APPLYING A PRESCRIBED AMOUNT OF TURN TO DEVELOP THE REQUIRED PRELOAD. THE ACTUAL PRELOAD WILL DEPEND ON HOW FAR THE BOLT IS TURNED AS WELL AS HOW MUCH PRELOAD WAS ESTABLISHED PRIOR TO THE TURNING.

1. SNUG THE JOINT TO BRING THE ASSEMBLY INTO FIRM AND COMPLETE CONTACT WITH A 3/4" WRENCH.
2. INSPECT THE JOINT TO VERIFY "SNUG TIGHT". (ANY GAPS IN STEEL IS UNACCEPTABLE)
3. MATCH MARK BEARING FACE OF THE BOLT AND ADJACENT MEMBER WALL WITH A SINGLE STRAIGHT LINE (REF BELOW).
4. THE BOLTING PATTERN SHOULD BE ACHIEVED BY USING A SYSTEMATIC APPROACH; APPLY THE REQUIRED TURNS AS GIVEN IN THE TABLE BELOW. BREAKER BAR MAY BE REQUIRED.
   4.1. NOTE: AT TIMES, TURNING OF THE BOLTS TO ACHIEVE "SNUG TIGHT" TIGHTENS THE BOLT TO A POINT THAT WILL NOT ALLOW ADDITIONAL TIGHTENING EVEN WITH A BREAKER BAR. THIS IS ACCEPTABLE IF THIS OCCURS.



MARK BOLT AND MEMBER WALL — DESIRED POSITION (1/3 TURN ILLUSTRATED)

Bolt Length	Condition Under Bolt Head and Under Nut		
	Both Faces Flat (normal to bolt axis)	One face sloped, but not more than 1:20	Both faces sloped, but not more than 1:20
Less than or equal to 4D	1/3 Turn	½ Turn	2/3 Turn
More than 4D and less than or equal to 8D	½ Turn	2/3 Turn	5/6 Turn
More than 8D and less than or equal to 12D	2/3 Turn	5/6 Turn	1 Turn

D = Bolt Diameter
Applicable only to steel joints

ABBREVIATIONS

A.B.	ANCHOR BOLT
A.F.F.	ABOVE FINISHED FLOOR
ACM	ALUMINUM COMPOSITE PANEL
ACT	ACOUSTICAL CEILING TILE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ALUM	ALUMINUM
ASF	ALUMINUM STORE FRONT
AWS	AMERICAN WELDING SOCIETY
C.C.	CENTER TO CENTER
C.J.	CONSTRUCTION JOINT
C.T.	CERAMIC TILE
CL	CENTER LINE
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
CONC.	CONCRETE
C.T.F.	CUT TO FIT
CWO	CONFIRM WITH OWNER
CONT.	CONTINUOUS
D.G.A.	DENSE-GRADED AGGREGATE
D.S.	DOWN SPOUT
DBL	DOUBLE
DIM	DIMENSION(S)
DTL.	DETAIL
E.F.	EXHAUST FAN
E.I.F.S.	EXTERIOR INSULATED FINISH SYSTEM
E.J.	EXPANSION JOINT
EQ	EQUAL
EW	EACH WAY
E.W.C.	ELECTRIC WATER COOLER
EXIST.	EXISTING
E.S.A.	EXPOSED STRUCTURE ABOVE
FBGS	FIBERGLASS
FCP	FIBER CEMENT PANEL
F.D.	FLOOR DRAIN
FDN	FOUNDATION
F.E.C.	FIRE EXTINGUISHER CABINET
F.F.	FINISHED FLOOR
FG	FLOAT GLASS 1/4"
F.G.	FINISHED GRADE
FLASH.	FLASHING
F.O.B.	FACE OF BRICK
F.O.M.	FACE OF MASONRY
F.O.S.	FACE OF STUD
FRP	FIBERGLASS REINFORCED PLASTIC
GA	GAUGE
GL.	GLASS (GLAZING)
GWB	GYPSUM WALLBOARD
GWBMR	GYPSUM WALLBOARD - MOISTURE RESISTANT
H.B.	HOSE BIB
HM	HOLLOW METAL
IFG	INSULATED FLOAT GLASS 1"
INSUL.	INSULATION
LAV	LAVATORY
LGM	LIGHT GAUGE METAL
LVL	LAMINATED VENEER LUMBER
M-BD	MAGNESIUM OXIDE BOARD
MAX.	MAXIMUM
MFR.	MANUFACTURER
MIN.	MINIMUM
MLP	METAL LINER PANEL
MTL	METAL
N.I.C.	NOT IN CONTRACT
NO. (#)	NUMBER
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.C.H.	ON CENTER HORIZONTAL
O.C.V.	ON CENTER VERTICAL
O.F.C.I.	OWNER FURNISHED CONTRACTOR INSTALLED
O.F.E.	OWNER FURNISHED EQUIPMENT
O.H.	OVER HEAD
OSB	ORIENTED STRAND BOARD
P	PAINT
P.A.F.	POWDER ACTUATED FASTENER
PC	POLYCARBONATE
PEMB	PRE-ENGINEERED METAL BUILDING
PERF	PERFORATED
PERIM.	PERIMETER
P-LAM	PLASTIC LAMINATE
PLY	PLYWOOD
PNL	PANEL
PRE-ENG	PRE-ENGINEERED
PREFAB	PREFABRICATED
PRE-FIN	PRE-FINISHED
PRE-MFR	PRE-MANUFACTURED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
P.T.	PRESSURE TREATED
PTAC	PACKAGED TERMINAL AIR CONDITIONER
PTN	PARTITION
PVC	POLYVINYL CHLORIDE
RCP	REFLECTED CEILING PLAN
REC.	RECOMMENDED
REQ.	REQUIRED, REQUIREMENTS
RFT	RESILIENT FLOOR TILE
R.R.	RESTROOM
S.B.	SPLASH BLOCK
S.D.	SOAP DISPENSER
SIPS	STRUCTURAL INSULATED PANEL
SF	SQUARE FOOT
S.O.G.	SLAB ON GRADE
SS	STAINLESS STEEL
STL	STEEL
STRUC.	STRUCTURAL
SYN	SYNTHETIC
TEMP.	TEMPERED
TOS	TOP OF STEEL
T.P.	TOILET PAPER
TS&P	TAPED, SEALED, & PAINTED
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
V.C.T.	VINYL COMPOSITION TILE
VEN	VENEER
VENT.	VENTILATED
WD	WOOD
W.W.F.	WELDED WIRE FABRIC
-/+	PLUS OR MINUS

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

2022-21_Midwest_Lee's Summit.pln

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

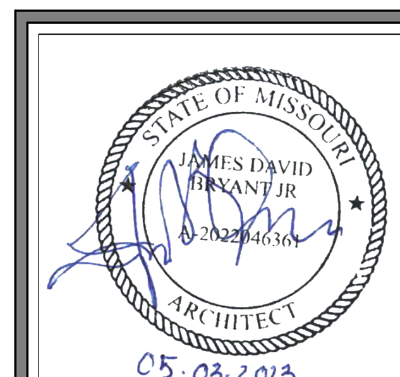
MODEL: AXIOM BETA
RETAIL TOWER
2023

2 OF 39

NEW CAR WASH FOR:

TUNNEL VISION CAR WASH

20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081



USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

SHEET:

MW-0.2

NOTES & ABBREVIATIONS

BUILDING CODE SUMMARY - Missouri
City of Lee's Summit, Jackson Co., Missouri
2018 International Building Code

NOTES

1. This project shall conform to the latest edition of the 2018 Missouri Building Code, including any local ordinances or other requirements imposed by the Fire Marshall having jurisdiction.
2. The listing below of pertinent Code Sections is not all inclusive, and therefore incumbent upon the General Contractor to assure the project is constructed in full compliance with all applicable codes and ordinances. Further, it is the GC's obligation to notify the architect/owner immediately if any part of the design/material selection/construction documents appear to be inconsistent or non-compliant with the Codes. Failure to do so may incur unforeseen costs of removal and replacement of items at the GC's expense.

PROJECT DATA:

Project Name:	Midwest Car Wash
Location:	20 SE Thompson Dr., Lee's Summit, Jackson Co., MO 64081
Owner:	Jason Bohnert (Owner's Rep) Midwest Car Wash Group
1st Floor Gross Area:	5,213 SF
1st Floor Occupied Area:	710 SF
2nd Floor Occupied Area:	518 SF
Total Occupied Area:	1,228 SF / 150 = 8 persons
Non-Occupied (Mechanical) Area:	4,494 SF / 300 = 14 persons
Total Gross Area:	5,731 SF (5,213 + 518)
Height:	27' - 0"
Tunnel Length:	120'
Climate Zone:	6A

304.1 B Business Use Group Car Wash

502.1 Address Identification
New and existing buildings shall be provided with *approved* address identification.
The address identification shall be legible and placed in a position that is visible from the street or road fronting the property.
Address identification characters shall contrast with their background.
Address numbers shall be Arabic numbers or alphabetical letters.
Numbers shall not be spelled out.
Each character shall be a minimum of 4 inches (102 mm) high with a minimum stroke width of 1/2 inch.
Where required by the fire *code official*, address identification shall be provided in additional approved locations to facilitate emergency response.
Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole or other approved sign or means shall be used to identify the structure.
Address identification shall be maintained.

Table 504.3 Allowable Height = 40'- 0"
Use Group B, Construction Type - 5B, Unprotected, Unsprinkled

Table 504.4 Allowable Number of Stories = 2 Stories

505.3 Equipment Platforms
Equipment platforms in buildings shall not be considered as a portion of the floor below.
Such equipment platforms shall not contribute to either the building area or the number of stories as regulated by Section 503.1.
The area of the equipment platform shall not be included in determining the fire area in accordance with Section 903.
Equipment platforms shall not be a part of any mezzanine and such platforms and the walkways, stairways, alternating tread devices and ladders providing access to an equipment platform shall not serve as a part of the means of egress from the building.

505.3.3 Guards
Equipment platforms shall have guards where required by Section 1015.2

Table 506.2 Allowable Area = 9,000 SF
Occupancy B, Construction Type - 5B, UnProtected / Not Sprinklered

Table 601 Fire Resistance Rating for Building Elements = 0 hours
Type 5B - Structural Frame, Walls, Partitions, Floors, Roof

Table 602 Fire Separation Rating based on Fire Separation Distance **= 0**
Occupancy Group B,Type 5B, Fire Separation Dist. = Greater than 30'

Table 705.8 Max Area Exterior Wall Openings based on Fire Separation Distance

Fire Separation Dist.	Degree of Opening Protection	Allowable Area
30' or >	Unprotected, Nonsprinklered	No Limit

Table 803.13 Interior Wall and Ceiling Finish Requirements by Occupancy
Occupancy Group B, NonSprinklered: **Corridors** TYPE B; **Rooms/Enclosed Spaces** TYPE C

903 Automatic Sprinkler Systems - Not Required

903.2.9 Fire Protection for Group S-1 (soap/wash supplies storage areas)
An automatic sprinkler system shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exists:
1. A Group S-1 fire area exceeds 12,000 square feet.
2. A Group S-1 fire area is located more than three stories above grade plane.
3. The combined area of all Group S-1 fire areas on all floors, including any mezzanines, exceeds 24,000 SF.
4. A Group S-1 fire area used for the storage of commercial motor vehicles where the fire area exceeds 5,000 square feet.
5. A Group S-1 occupancy used for the storage of upholstered furniture or mattresses exceeds 2,500 SF.

906.1 Portable Fire Extinguishers - Where Required :
906.1.3 In areas where flammable or combustible liquids are stored, used or dispensed.
See Local Fire Marshall for any other required locations.

907.1 Fire Alarm and Detection Systems - Not Required

Table 1004.5 Maximum Floor Area per Occupant:
Mechanical equipment room, 300 gross sf; Business Areas, 150 gross sf

Table 1006.2.1 Spaces with one Exit or Exist Access Doorway
Occupancy B Max Occupant Load 49 (W/O Sprinkler) Max Egress Travel 75'

1006.2.2.1 Boiler, Incinerator and Furnace Rooms
Two *exit access doorways* are required in boiler, incinerator and furnace rooms where the area is over 500 square feet (46 m²) and any fuel-fired equipment exceeds 400,000 British thermal units (Btu) (422 000 KJ) input capacity.
Where two *exit access doorways* are required, one is permitted to be a fixed ladder or an *alternating tread device*.
Exit access doorways shall be separated by a horizontal distance equal to one-half the length of the maximum overall diagonal dimension of the room.

1006.3.2 (2) Stories with one Exit or Access to one Exit
Occupancy B, Max Occupant Load = 49, Max Egress Travel = 75'

1006.3.3 Single Exits
A single exit or access to a single exit shall be permitted from any story or occupied roof where one of the following conditions exists:
- The occupant load, number of dwelling units and common path of egress travel distance do not exceed the values in Table 1006.3.3(1) or 1006.3.3(2).
- Rooms, areas and spaces complying with Section 1006.2.1 with exits that discharge directly to the exterior at the level of exit discharge, are permitted to have one exit or access to a single exit.

1008.2 Illumination Required
The *means of egress* serving a room or space shall be illuminated at all times that the room or space is occupied.

1009.1 Accessible Means of Egress Required
Accessible spaces shall be provided with not less than one *accessible means of egress*.

1010.1.7 Thresholds
Thresholds at doorways shall not exceed 3/4 inch (19.1 mm) in height above the finished floor or landing for sliding doors serving dwelling units or 1/2 inch (12.7 mm) above the finished floor or landing for other doors. Raised thresholds and floor level changes greater than 1/4 inch (6.4 mm) at doorways shall be beveled with a slope not greater than one unit vertical in two units horizontal (50-percent slope).

1011.2 Stairs: Width and Capacity
The required capacity of *stairways* shall be determined as specified in Section 1005.1, but the minimum width shall be not less than 44 inches (1118 mm). See Section 1009.3 for accessible *means of egress stairways*.
Exceptions: Stairways serving an occupant load of less than 50 shall have a width of not less than 36 inches.

1011.3 Headroom
Stairways shall have a headroom clearance of not less than 80 inches (2032 mm) measured vertically from a line connecting the edge of the *nosings*. Such headroom shall be continuous above the *stairway* to the point where the line intersects the landing below, one tread depth beyond the bottom riser. The minimum clearance shall be maintained the full width of the *stairway* and landing.

1011.5.2 Riser Height and Tread Depth
Stair riser heights shall be 7 inches (178 mm) maximum and 4 inches (102 mm) minimum. The riser height shall be measured vertically between the *nosings* of adjacent treads. Rectangular tread depths shall be 11 inches minimum measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's *nosing*.

1011.5.5.3 Solid Risers
Risers shall be solid.

1011.7.1 Stairway Walking Surface
The walking surface of treads and landings of a *stairway* shall not be sloped steeper than one unit vertical in 48 units horizontal (2-percent slope) in any direction. *Stairway* treads and landings shall have a solid surface. Finish floor surfaces shall be securely attached.

1011.11 Handrails
Stairways shall have *handrails* on each side and shall comply with Section 1014.

1011.16 Ladders
Permanent ladders shall not serve as a part of the means of egress from occupied spaces within a building.
Permanent ladders shall be constructed in accordance with Section 306.5 of the International Mechanical Code.
Permanent ladders shall be permitted to provide access to the following areas:
1. Spaces frequented only by personnel for maintenance, repair or monitoring of equipment.
2. Nonoccupiable spaces accessed only by catwalks, crawl spaces, freight elevators or very narrow passageways.
3. Raised areas used primarily for purposes of security, life safety or fire safety including, but not limited to, observation galleries, prison guard towers, fire towers or lifeguard stands.
4. Elevated levels in Group U not open to the general public.
5. Nonoccupied roofs that are not required to have stairway access in accordance with Section 1011.12.1.
6. Where permitted to access equipment and appliances in accordance with Section 306.5 of the International Mechanical Code.

1013 Exit Signs
1. Exit signs are not required in rooms or areas that require only one exit or exit access.
2. Main exterior exit doors or gates that are obviously and clearly identifiable as exits need not have exit signs where approved by the building official.

Table 1017.2 Exit Access Travel Distance
Occupancy B, Without Sprinkler System = 200 feet

1018.3 Aisles in Groups B and M
In Group B and M occupancies, the minimum clear aisle width shall be determined by Section 1005.1 for the *occupant load* served.
Exception: Nonpublic *aisles* serving less than 50 people and not required to be *accessible* by Chapter 11 need not exceed 28 inches (711 mm) in width**.**

1102 Accessibility - Compliance
Buildings and facilities shall be designed and constructed to be accessible in accordance with this code and ICC A117.1.

1103.2.9 Equipment Spaces
Spaces frequented only for maintenance of equipment are not required to comply with this chapter.

1204.3 Artificial Light
Artificial light shall be provided that is adequate to provide an average illumination of 10 footcandles (107 lux) over the area of the room at a height of 30 inches (762 mm) above the floor level.

1301.1.1 Energy Efficiency - Criteria
Buildings shall be designed and constructed in accordance with the Int'l. Energy Cons. Code.

1406.8 Metal Composite Materials Fire resistance rating
Where MCM are used on exterior walls required to have a fire-resistance rating in accordance with Section 705, evidence shall be submitted to the building official that the required fire-resistance rating is maintained.

Exception: MCM systems not containing foam plastic insulation, which are installed on the outer surface of a fire-resistance-rated exterior wall in a manner such that the attachments do not penetrate through the entire exterior wall assembly, shall not be required to comply with this section.

1406.9 MCM Surface-Burning Characteristics
Unless otherwise specified, MCM shall have a flame spread index of 75 or less and a smoke-developed index of 450 or less when tested in the maximum thickness intended for use in accordance with ASTM E84 or UL 723.

1407.2 EIFS (Exterior Insulation and Finish Systems)-
EIFS shall be constructed such that it meets the performance characteristics required in ASTM E2568.

1407.3 EIFS - Structural Design
The underlying structural framing and substrate shall be designed and constructed to resist loads as required by Chapter 16 of 2018 IBC.

1407.4 EIFS - Weather Resistance
EIFS shall comply with Section 1402 and shall be designed and constructed to resist wind and rain in accordance with this section and the **manufacturer's application instructions.**

1407.5 EIFS - Installation
Installation of EIFS and EIFS with drainage shall be **in accordance with the EIFS manufacturer's instructions.**

GENERAL EIFS SPECIFICATION EXAMPLE BELOW:

1.1 SECTION REQUIREMENTS
A. Comply with EIFS Industry Members Association's (EIMA) "Guideline Specification for Exterior Insulation and Finish Systems (EIFS) Class PB" with impact classification and range per EIMA 101.86 of Standard Impact Resistance: 25-49 inch-lb and High Impact Resistance: 90-150 inch-lb.
B. Structural Performance: Engineer, fabricate, and install prefabricated panels to withstand the effects of normal thermal movement, gravity loads, inward- or outward-acting uniform wind velocity pressures, and deflection of less than L/240 of span of framing members.
C. Submittals: Product Data and Samples of finishes.
1. For prefabricated panels, submit Shop Drawings and structural analysis data signed and sealed by the qualified professional engineer who was responsible for their preparation.
D. Installer Qualifications: Certified in writing by system manufacturer.

2.1 MANUFACTURERS
A. Dryvit, Sto or approved equal.

3.1 INSTALLATION
A. Comply with system manufacturer's written instructions for installation of system as applicable to each type of substrate indicated.
B. 1. Install panels level, plumb, and true to line with no variation in plane or alignment exceeding 1/16 inch and no variation in position exceeding 1/8 inch.
2. Maintain clearance between panels required for installing joint sealants.
C. Prepare joints and apply sealants to comply with applicable requirements with Manufacturers specifications.
D. Obtain Manufacturers warranty.

1504.1 Wind Resistance Performance Requirements of Roofs
Roof decks and roof coverings shall be designed for wind loads in accordance with Chapter 16 and Sections 1504.2, 1504.3 and 1504.4.

1504.3.1 Other Roof Systems
Built-up, modified bitumen, fully adhered or mechanically attached single-ply roof systems, metal panel roof systems applied to a solid or closely fitted deck and other types of membrane roof coverings shall be tested in accordance with FM 4474, UL 580 or UL 1897.

Table 1505.1 Minimum Roof covering Classification for Types of Construction
Construction Type – 5; Roof Class C
See Section 1507 for roof requirements including but not limited to slope, support, etc.

1508.1 Roof Insulation - General
The use of above-deck thermal insulation shall be permitted provided such insulation is covered with an approved roof covering and passes the tests of NFPA 276 or UL 1256 when tested as an assembly.

1512.1 Photovoltaic Panels and Modules
Photovoltaic panels and modules installed upon a roof or as an integral part of a roof assembly shall comply with the requirements of this code and the International Fire Code.

1704.2 Special Inspections and Tests
Where application is made to the *building official* for construction as specified in Section 105, the owner or the owner's authorized agent, other than the contractor, shall employ one or more *approved agencies* to provide *special inspections* and tests during construction on the types of work specified in Section 1705 and identify the *approved agencies* to the *building official*.

These *special inspections* and tests are in addition to the inspections by the *building official* that are identified in Section 110.

Exceptions:
1. Special inspections and tests are not required for construction of a minor nature or as warranted by conditions in the jurisdiction as approved by the building official.
2. Unless otherwise required by the building official, special inspections and tests are not required for Group U occupancies that are accessory to a residential occupancy including, but not limited to, those listed in Section 312.1.
3. Special inspections and tests are not required for portions of structures designed and constructed in accordance with the cold-formed steel light-frame construction provisions of Section 2211.7 or the conventional light-frame construction provisions of Section 2308.
4. The contractor is permitted to employ the approved agencies where the contractor is also the owner.

2406.4.3 Glazing in Windows
Glazing in an individual fixed or operable panel that meets all of the following conditions shall be considered a hazardous location:

1. The exposed area of an individual pane is greater than 9 square feet (0.84 m²).
2. The bottom edge of the glazing is less than 18 inches (457 mm) above the floor.
3. The top edge of the glazing is greater than 36 inches (914 mm) above the floor.
4. One or more walking surface(s) are within 36 inches (914 mm), measured horizontally and in a straight line, of the plane of the glazing.

2608 Light-Transmitting Plastic Glazing
2608.1 Buildings of Type VB Construction
Openings in the exterior walls of buildings of Type VB construction, where not required to be protected by Section 705, shall be permitted to be glazed or equipped with light-transmitting plastic. Light-transmitting plastic glazing shall comply with Section 2606.

2609 Light-Transmitting Plastic Roof Panels
Light-transmitting plastic roof panels shall comply with this section and Section 2606. Light-transmitting plastic roof panels shall not be installed in Groups H, I-2 and I-3. In all other groups, light-transmitting plastic roof panels shall comply with any one of the following conditions:

1. The building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.
2. The roof construction is not required to have a fire-resistance rating by Table 601.
3. The roof panels meet the requirements for roof coverings in accordance with Chapter 15.

END

COMcheck Software Version COMcheckWeb

Envelope Compliance Certificate

Project Information

Energy Code:	2018 IECC
Project Title:	2022-21_Midwest - Lee's Summit
Location:	Lees Summit, Missouri
Climate Zone:	4a
Project Type:	New Construction
Vertical Glazing / Wall Area:	17%

Construction Site:
20 SE Thompson Dr
Lee's Summit, Missouri 64081

Owner/Agent:
Jason Bohnert
Midwest Car Wash Group

Designer/Contractor:
David Bryant
Modernwash
5220 Scottsville Road
Bowling Green, Kentucky 42101
800-511-7208
david@modernwash.net

Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed
On-site Renewable Energy, 1.0 credit

Building Area	Floor Area
1-Control Tower (Automotive Facility) : Nonresidential	558
2-Dog Wash (Automotive Facility) : Nonresidential	281

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
Roof: Attic Roof, Steel Joists, [Bldg. Use 1 - Control Tower]	558	30.0	0.0	0.041	0.027
Roof: Attic Roof, Steel Joists, [Bldg. Use 1 - Control Tower]	558	30.0	0.0	0.041	0.027
Floor: Unheated Slab-On-Grade, [Bldg. Use 1 - Control Tower] (d)	101	---	---	0.730	0.540
Roof: Attic Roof, Steel Joists, [Bldg. Use 2 - Dog Wash]	281	30.0	0.0	0.041	0.027
Floor: Unheated Slab-On-Grade, [Bldg. Use 2 - Dog Wash] (d)	79	---	---	0.730	0.540
NORTH					
Ext. Wall: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Control Tower]	179	21.0	7.5	0.059	0.064
Ext. Wall: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Control Tower]	179	21.0	7.5	0.059	0.064
Ext. Wall: Steel-Framed, 16in. o.c., [Bldg. Use 2 - Dog Wash]	95	21.0	7.5	0.059	0.064
EAST					
Ext. Wall: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Control Tower]	292	21.0	7.5	0.059	0.064
Window: Other Window: Fixed, Perf. Specs.: Product ID HS1-C180, SHGC 0.37, PF 0.20, VT 0.70, [Bldg. Use 1 - Control Tower] (c)	42	---	---	0.248	0.380
Ext. Wall: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Control Tower]	292	21.0	7.5	0.059	0.064
Window: Other Window: Fixed, Perf. Specs.: Product ID HS1-C180, SHGC 0.37, PF 3.00, VT 0.70, [Bldg. Use 1 - Control Tower] (c)	16	---	---	0.248	0.380

Project Title: 2022-21_Midwest - Lee's Summit
Data filename:
Report date: 03/13/23
Page 1 of 12

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
Window: Other Window: Fixed, Perf. Specs.: Product ID HS1-C180, SHGC 0.37, PF 0.20, VT 0.70, [Bldg. Use 1 - Control Tower] (c)	42	---	---	0.248	0.380
Ext. Wall: Steel-Framed, 16in. o.c., [Bldg. Use 2 - Dog Wash]	285	21.0	7.5	0.059	0.064
Door: Insulated Metal, Swinging, [Bldg. Use 2 - Dog Wash]	24	---	---	0.360	0.610
SOUTH					
Ext. Wall: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Control Tower]	132	21.0	7.5	0.059	0.064
Ext. Wall: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Control Tower]	132	21.0	7.5	0.059	0.064
Door: , Perf. Specs.: Product ID Non-NFRC:P-TUB-49712, SHGC 0.25, PF 3.00, VT 0.90, [Bldg. Use 1 - Control Tower] (c)	24	---	---	0.365	0.770
Ext. Wall: Steel-Framed, 16in. o.c., [Bldg. Use 2 - Dog Wash]	95	21.0	7.5	0.059	0.064
WEST					
Ext. Wall: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Control Tower]	287	21.0	7.5	0.059	0.064
Window: Other Window: Fixed, Perf. Specs.: Product ID HS1-C180, SHGC 0.37, PF 3.00, VT 0.70, [Bldg. Use 1 - Control Tower] (c)	139	---	---	0.248	0.380
Ext. Wall: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Control Tower]	287	21.0	7.5	0.059	0.064
Door: , Perf. Specs.: Product ID Non-NFRC:P-TUB-49712, SHGC 0.25, PF 3.00, VT 0.90, [Bldg. Use 1 - Control Tower] (c)	24	---	---	0.365	0.770
Window: Other Window: Fixed, Perf. Specs.: Product ID HS1-C180, SHGC 0.37, PF 3.00, VT 0.70, [Bldg. Use 1 - Control Tower] (c)	66	---	---	0.248	0.380
Ext. Wall: Steel-Framed, 16in. o.c., [Bldg. Use 2 - Dog Wash]	285	21.0	7.5	0.059	0.064
Door: , Perf. Specs.: Product ID Non-NFRC:P-TUB-49712, SHGC 0.25, PF 3.00, VT 0.90, [Bldg. Use 2 - Dog Wash] (c)	24	---	---	0.365	0.770
Door: , Perf. Specs.: Product ID Non-NFRC:P-TUB-49712, SHGC 0.25, PF 3.00, VT 0.90, [Bldg. Use 2 - Dog Wash] (c)	24	---	---	0.365	0.770
Window: Other Window: Fixed, Perf. Specs.: Product ID HS1-C180, SHGC 0.37, PF 0.63, VT 0.70, [Bldg. Use 2 - Dog Wash] (c)	16	---	---	0.248	0.380
Window: Other Window: Fixed, Perf. Specs.: Product ID HS1-C180, SHGC 0.37, PF 0.63, VT 0.70, [Bldg. Use 2 - Dog Wash] (c)	16	---	---	0.248	0.380

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
(b) 'Other' components require supporting documentation for proposed U-factors.
(c) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.
(d) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

Envelope PASSES: Design 8% better than code

Envelope Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 2018 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Eric Hathaway - Chief of Design — ERIC W HATHAWAY — 03/14/2023
Name - Title — Signature — Date

Project Title: 2022-21_Midwest - Lee's Summit
Data filename:
Report date: 03/13/23
Page 2 of 12

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

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MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

3 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JAMES DAVID FORANT JR
2010020660
REGISTERED ARCHITECT
05-03-2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

SHEET:
MW-0.3
GENERAL INFORMATION

ModernWash Project Color Selection Check List
Project Name: Tunnel Vision Car Wash (Midwest) - Lee's Summit
20 SE Thompson Dr, Lee's Summit, 64081

Main Frame RAL: Jet Black (RAL 9005)

Wash Bay Roof: Blue Polycarbonate

Tower Roof: Regal White (Mega-Rib - McElroy)

Pay Canopy Roof: Matte Black (Mega-Rib - McElroy)

Gutter and Downspouts at all locations: Matte Black (McElroy)

Wash Bay + Tower Accent EIFS : Blue (PANTONE 2144C)

Knee Wall & above Wash Bay Glass EIFS: Grey (PANTONE 2331C)

Office + Equipment Tower EIFS: Light Grey (PANTONE 2330C)

Office + Equipment Tower Accent Bands EIFS: Black

Pay Canopy Column-Wrap EIFS: Blue (PANTONE 2144C)

Break Metal Trims Trims: Matte Black (McElroy)

Storefront Polycarbonate: Clear

PVC: White

Equipment Room R-panel Ceiling: White

Liner Panel: White

Wash Bay Louver Color: Grey (PANTONE 2331C)

Equipment Room Louver Color: Blue (PANTONE 2144C)

Stair System: Grey

Ships Ladder: Galvanized

Handrail: Stainless Steel

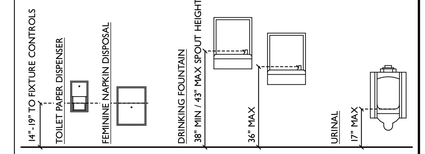
Listed material colors below denote colors represented in the Modernwash renders. Please note colors shown in render may vary depending on monitor or device as well as shadow and light settings. Not all items listed below necessitate the material is included in Modernwash's scope therefore some items may be supplied by others. Confirm materials supplied by modernwash with quote. By signing you give approval to supply the Modernwash materials in the color listed below. Changing color after signing may add additional cost and/or delay.

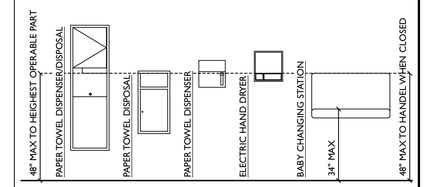
Color samples provided upon request.

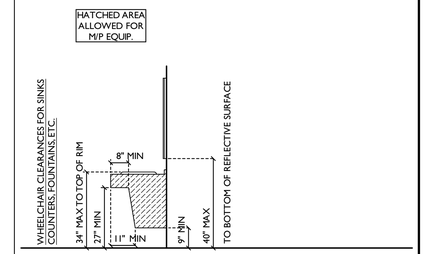
Approved by: Jason Bohnert Date: 4/20/23

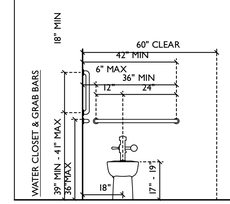
Signature:

STANDARD ADA REQUIREMENTS





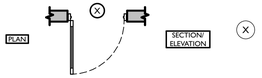




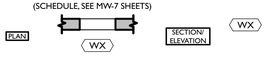
SYMBOLS LEGEND:

1. ZONE/ROOM LABEL
(SEE OCCUPANCY SCHEDULE ON LIFE SAFETY PLAN)

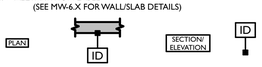
2. DOOR LABEL
(SCHEDULE , SEE MW-7 SHEETS)



3. WINDOW LABEL
(SCHEDULE, SEE MW-7 SHEETS)



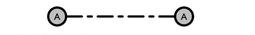
4. WALL/PARTITION LABEL
(SEE MW-6.X FOR WALL/SLAB DETAILS)



5. SLAB/FLOOR/CEILING LABEL
(SEE FLOOR PLANS)

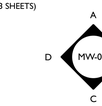
6. ELEVATION MARK
(SEE ELEVATION PLANS)

7. COLUMN LINE
(LOCATION MAY VARY)

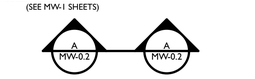


8. EXTERIOR ELEVATION
(SEE FLOOR PLANS)

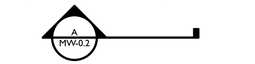
9. INTERIOR ELEVATION
(SEE MW-3 SHEETS)



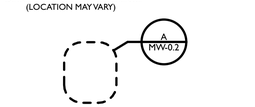
10. BUILDING SECTION
(SEE MW-1 SHEETS)



11. PARTIAL/WALL SECTION
(SEE FLOOR PLANS &/OR SECTIONS)



12. DETAIL/ENLARGEMENT REFERENCE
(LOCATION MAY VARY)



13. REVISION REFERENCE
(SEE SHEET INDEX & REVISION TABLE)

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

4 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

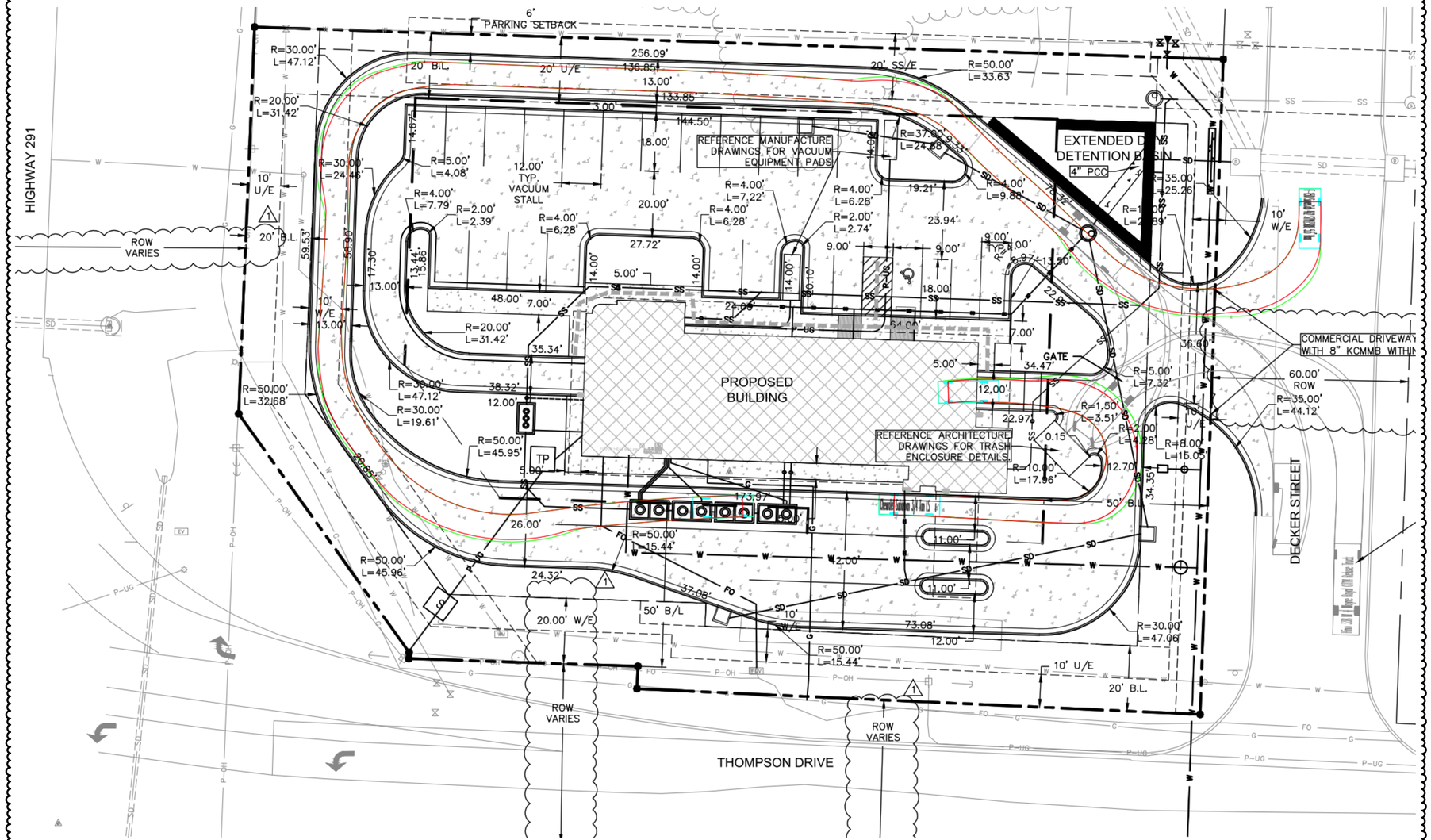
USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

SHEET:
MW-0.4
GENERAL INFORMATION

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21



NOTE:
VEGETATIVE SCREENING SHOULD BE PROVIDED AROUND GROUND-MOUNTED UNITS PER CITY REQUIREMENTS. THE SPACING BETWEEN THE UNITS AND PLANTINGS SHOULD BE IN ACCORDANCE WITH MANUFACTURER REQUIREMENTS.

NOTE:
THIS SITE DRAWING WAS PRODUCED BY OLSSON. IT IS SHOWN ON THIS DRAWING SET FOR REFERENCE ONLY. REFER TO CIVIL DRAWINGS FOR ALL CIVIL INFORMATION.

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT
1	06/09/2023	TRENCH DRAWING UPDATE

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

5 OF 39

NEW CAR WASH FOR:

TUNNEL VISION CAR WASH

20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JAMES DAVID FORANTE JR
2024031434
ARCHITECT
05-03-2023

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PRELIMINARY

PLOT DATE:	6/9/23
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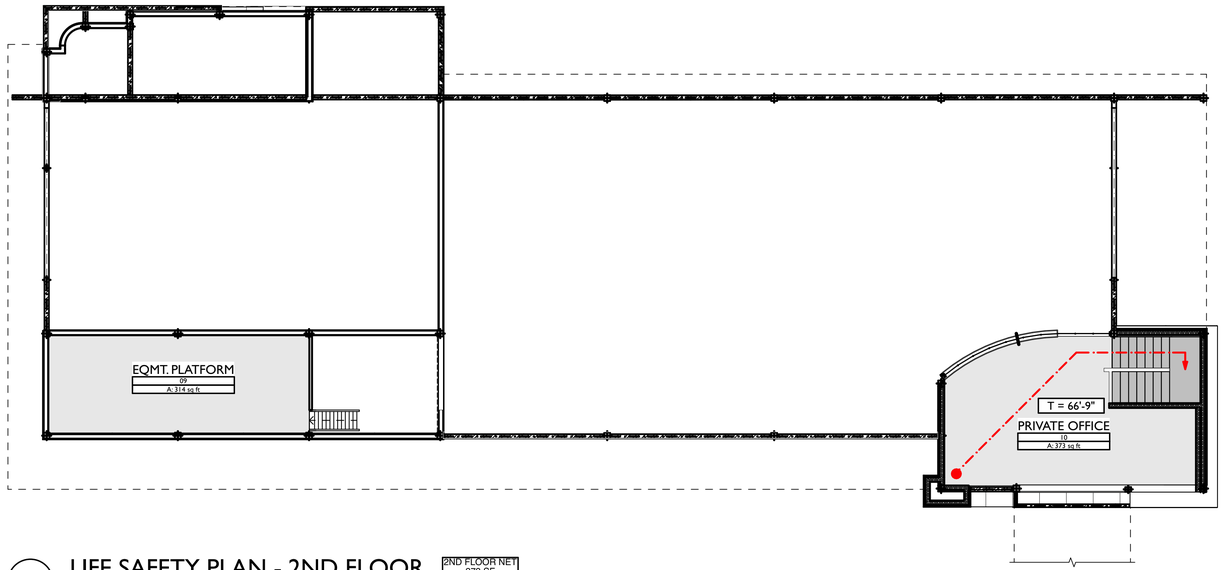
CHECKED BY:	#####

SHEET:

MW-0.5

SITE PLAN

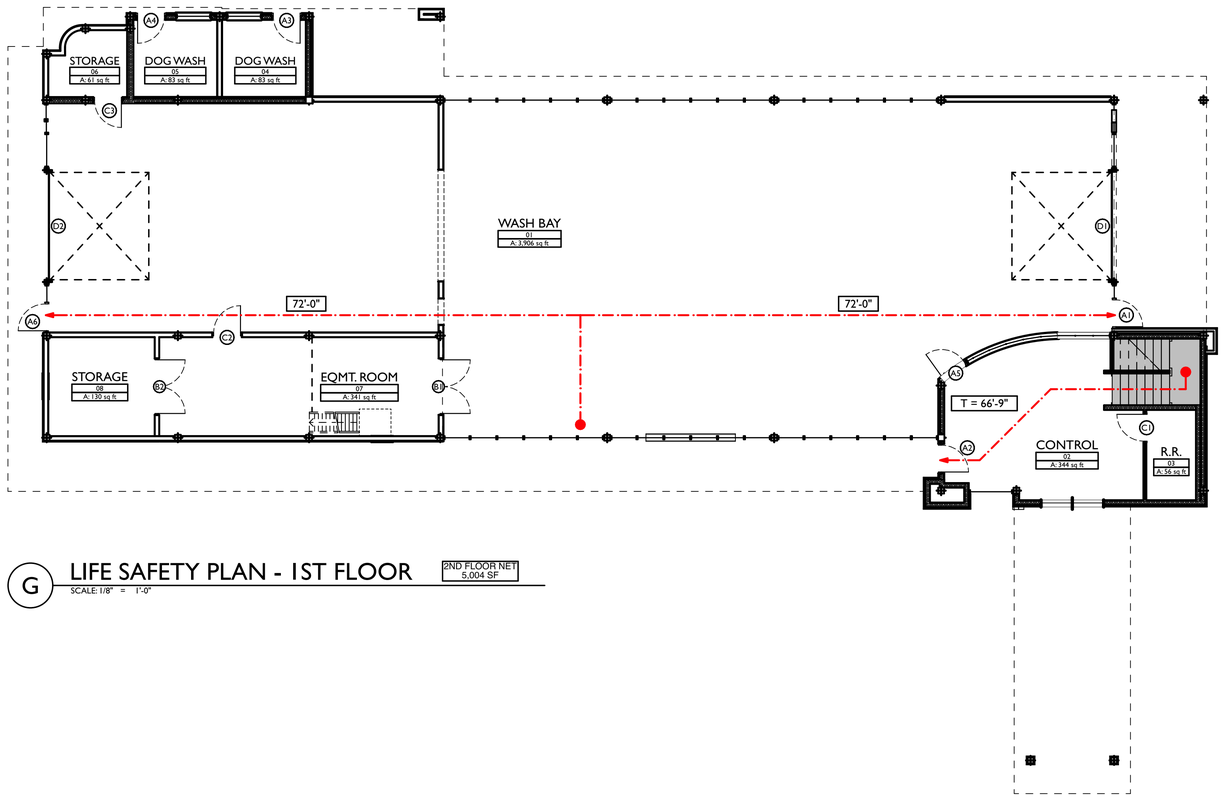
DATE OF CREATION: 09/09/21 MW JOB #: 2022-21



B LIFE SAFETY PLAN - 2ND FLOOR

SCALE: 1/8" = 1'-0"

2ND FLOOR NET
373 SF



G LIFE SAFETY PLAN - 1ST FLOOR

SCALE: 1/8" = 1'-0"

2ND FLOOR NET
5,004 SF

TOTAL BLDG. GROSS
5,722 SF

DATE OF CREATION: 09/09/2021 MW JOB #: 2022-21

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

6 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

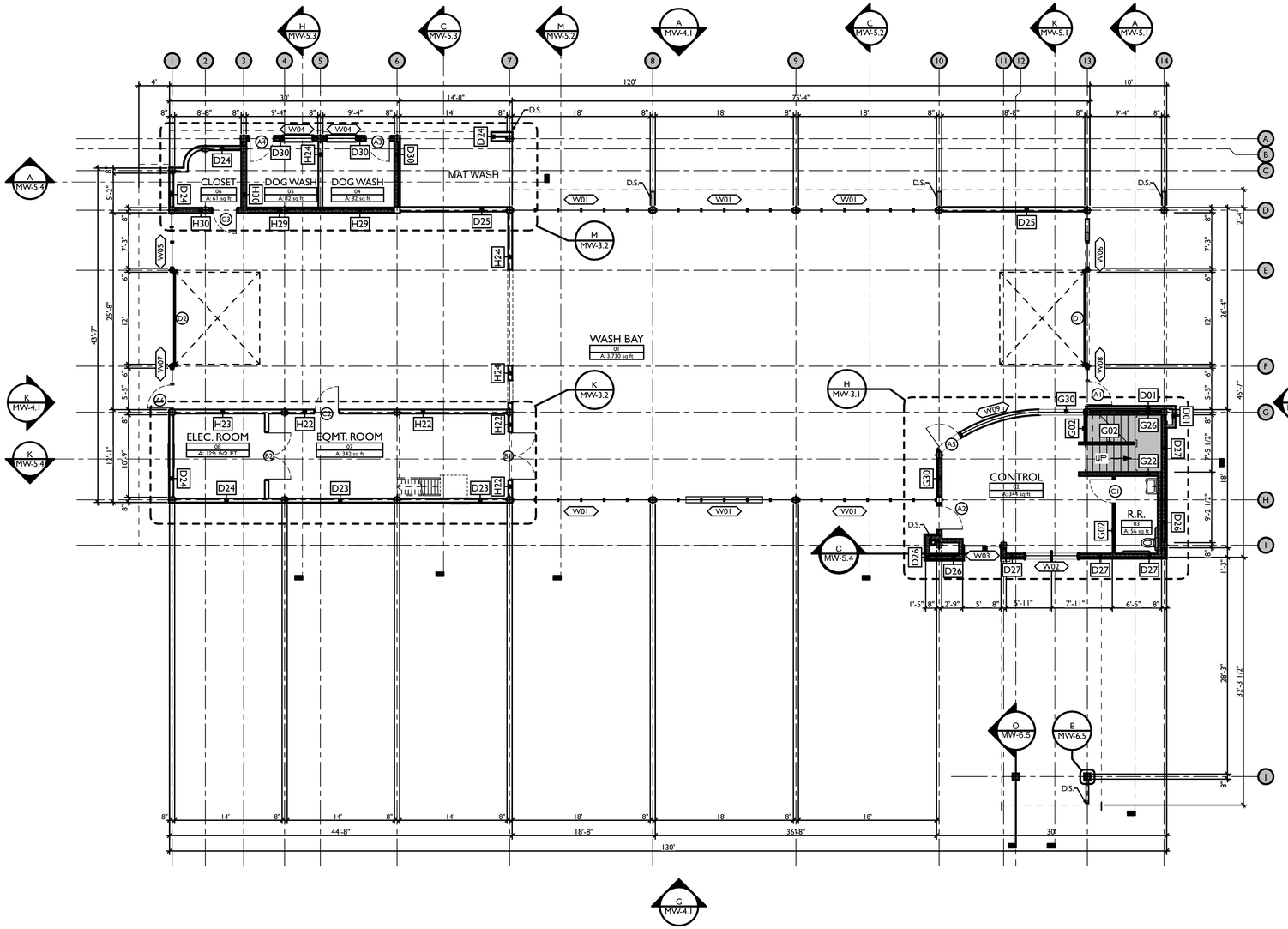
STATE OF MISSOURI
JAMES DAVID
ORGANT JR
2010038430
ARCHITECT
05-03-2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	TL

SHEET:
MW-0.6
LIFE SAFETY PLAN



A 1st FLOOR
SCALE: 1/8" = 1'-0"

FIRST FLOOR GSF
A1: 5,213 sq ft

NOTE: AN EPOXY COATING IS TO BE APPLIED ON THE FLOOR OF EACH OF THE FOLLOWING ROOMS:

01 - WASH BAY (EXCLUDING TRENCH)
02 - CONTROL ROOM
03 - R.R.
04 - DOG WASH
05 - DOG WASH
06 - CLOSET
07 - EQMT. ROOM
08 - ELEC. ROOM

EPOXY FINISH SHOULD BE COORDINATED WITH OWNER.

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

7 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JAMES DAVID FORGANT JR
2013036004
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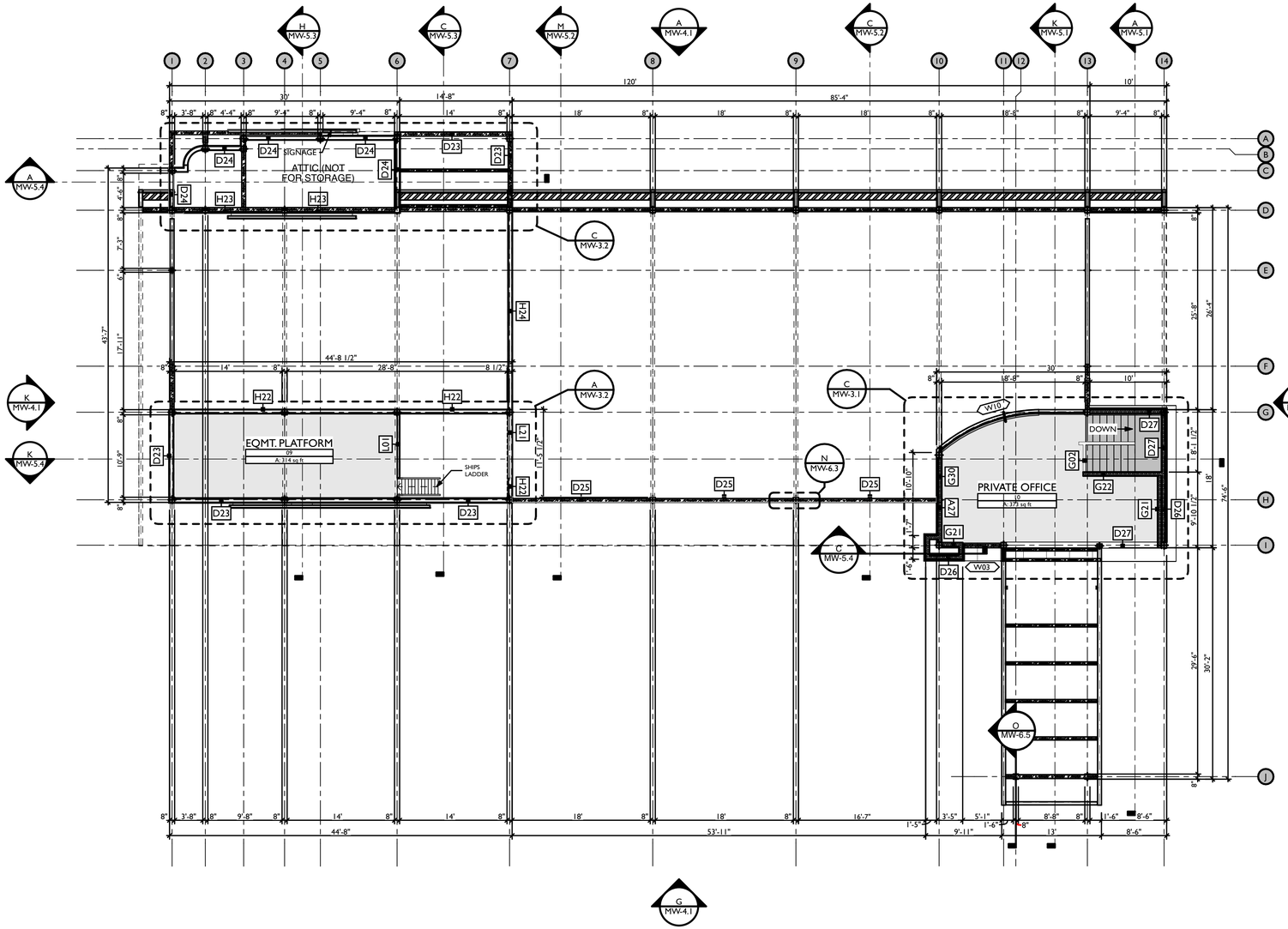
USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	TL

SHEET:
MW-1.1
1st FLOOR PLAN

DATE OF CREATION: 09/09/2021 MW JOB #: 2022-21



B 2nd FLOOR
SCALE: 1/8" = 1'-0"

SECOND FLOOR GSF
A: 518 SQ FT

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

8 OF 39

NEW CAR WASH FOR:

TUNNEL VISION CAR WASH

20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JAMES DAVID FORANT JR
2013036224
ARCHITECT
05.03.2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

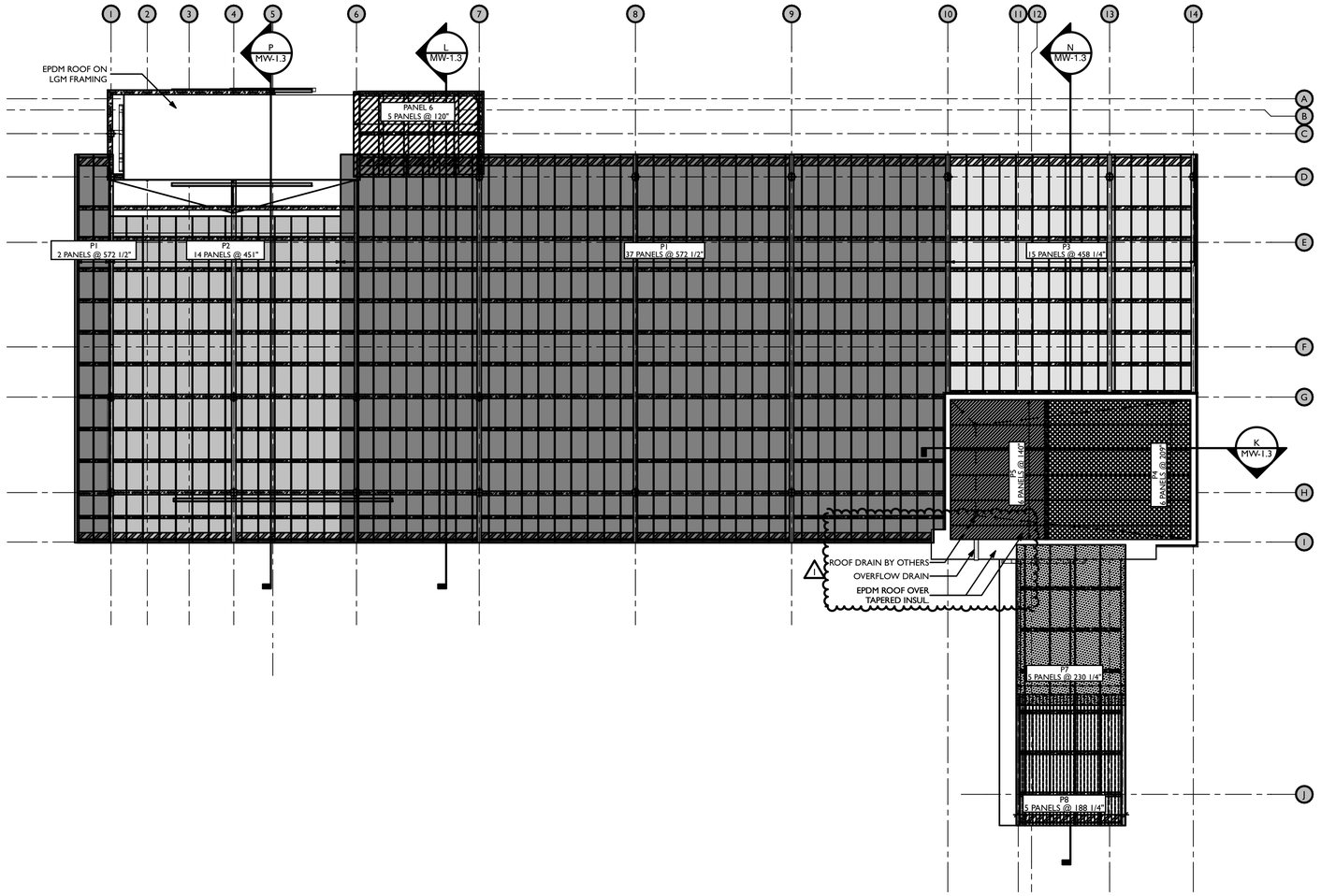
PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	TL

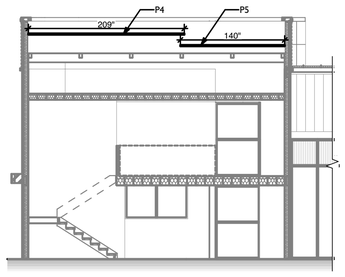
SHEET:

MW-1.2

2nd FLOOR PLAN

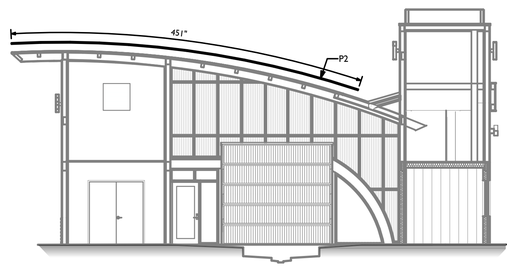
DATE OF CREATION: 09/09/2021 MW JOB #: 2022-21



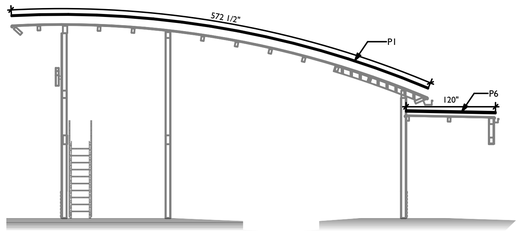


K ROOF SECTION

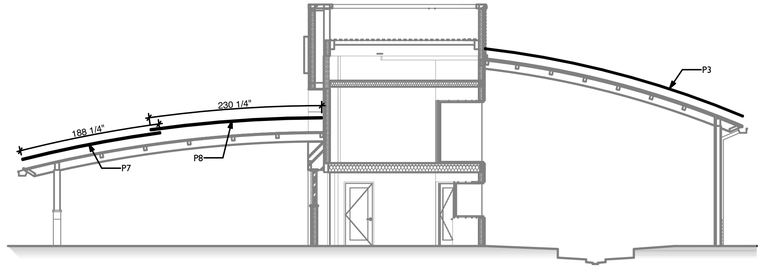
B ROOF PANEL LAYOUT
SCALE: 1/8" = 1'-0"



P ROOF SECTION
SCALE: 1/8" = 1'-0"



L ROOF SECTION
SCALE: 1/8" = 1'-0"



N ROOF SECTION
SCALE: 1/8" = 1'-0"

DATE OF CREATION: 09/09/2021 MW JOB #: 2022-21

REVISIONS		
ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

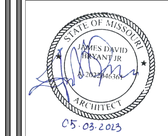
MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

9 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH

20 SE THOMPSON DR.
LEE'S SUMMIT, MO 64081



USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY	
PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	TL

SHEET:
MW-1.3
ROOF PLAN

572 1/2"

WASH BAY (FULL WIDTH)
56 PANELS @ 572 1/2"
106'-2 1/8" TOP SIDE RADIUS
POLYCARBONATE
COLOR: BLUE
PANEL DESIGNATION: P1

451"

WASH BAY @ EQUIP.TOWER
13 PANELS @ 451"
106'-11 1/4" TOP SIDE RADIUS
POLYCARBONATE
COLOR: BLUE
PANEL DESIGNATION: P2

358 1/4"

WASH BAY @ CTRL.TOWER
15 PANELS @ 458 1/4"
106'-1 7/8" TOP SIDE RADIUS
POLYCARBONATE
COLOR: BLUE
PANEL DESIGNATION: P3

209"

CONTROL TOWER
3 PANELS @ 209"
24 GA. MEGA-RIB
COLOR: REGAL WHITE
PANEL DESIGNATION: P4

140"

CONTROL TOWER
3 PANELS @ 140"
24 GA. MEGA-RIB
COLOR: REGAL WHITE
PANEL DESIGNATION: P5

120"

EQUIP.TOWER CANOPY
5 PANELS @ 120"
24 GA. MEGA-RIB
COLOR: MATTE BLACK
PANEL DESIGNATION: P6

COMPANY NAME: MODERNWASH
PHONE NUMBER: 1-800-511-7208
CONTACT NAME: ERIC HATHAWAY
EMAIL ADDRESS: ERIC@MODERNWASH.NET

PROJECT NAME: MIDWEST CAR WASH
PROJECT LOCATION: RAYMORE, MO
DESCRIPTION: PAY CANOPY
PANEL DESIGNATION: P7

PANEL PROFILE NAME: MEGA-RIB MANUFACTURER: MCELROY
color: MATTE BLACK

MATERIAL SUBSTRATE: STEEL GAUGE: 24

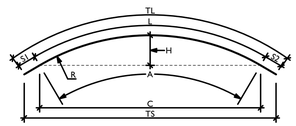
PANEL CURVATURE TYPE : CONVEX CONCAVE
COLOR SIDE: TOP BOTTOM

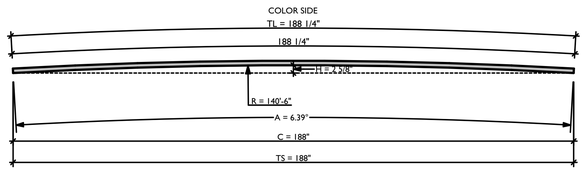
PANEL QUANITY: 5 PANEL LENGTH: 188 1/4"

(L) LENGTH OF ARC SECTION: 188 1/4"
(C) CORD OF ARC SECTION: 188"
(H) HEIGHT OF ARC SECTION: 2 5/8"
(A) ANGLE OF ARC SECTION: 6.39
(R) RADIUS OF ARC AT DECK: 1686"

(S1) STRAIGHT LEG #1: N/A
(S2) STRAIGHT LEG #2: N/A

(TL) TOTAL LENGTH: 188 1/4"
(TS) TOTAL SPAN: 188"





COMPANY NAME: MODERNWASH
PHONE NUMBER: 1-800-511-7208
CONTACT NAME: ERIC HATHAWAY
EMAIL ADDRESS: ERIC@MODERNWASH.NET

PROJECT NAME: MIDWEST CAR WASH
PROJECT LOCATION: RAYMORE, MO
DESCRIPTION: PAY CANOPY
PANEL DESIGNATION: P8

PANEL PROFILE NAME: MEGA-RIB MANUFACTURER: MCELROY
color: MATTE BLACK

MATERIAL SUBSTRATE: STEEL GAUGE: 24

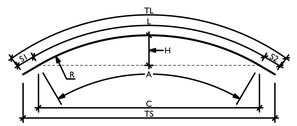
PANEL CURVATURE TYPE : CONVEX CONCAVE
COLOR SIDE: TOP BOTTOM

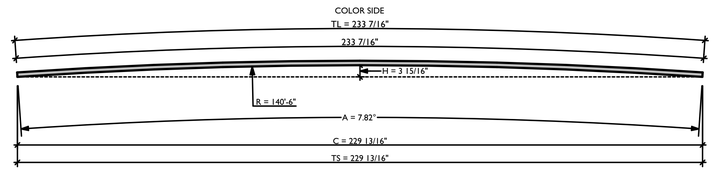
PANEL QUANITY: 5 PANEL LENGTH: 230 1/4"

(L) LENGTH OF ARC SECTION: 230 3/8"
(C) CORD OF ARC SECTION: 229 3/4"
(H) HEIGHT OF ARC SECTION: 3 7/8"
(A) ANGLE OF ARC SECTION: 7.82
(R) RADIUS OF ARC AT DECK: 1686"

(S1) STRAIGHT LEG #1: N/A
(S2) STRAIGHT LEG #2: N/A

(TL) TOTAL LENGTH: 230 3/8"
(TS) TOTAL SPAN: 299 3/4"





DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

10 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

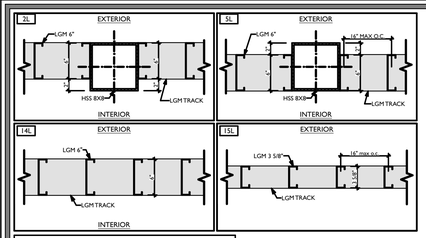
STATE OF MISSOURI
JAMES DAVID ORGANTI JR
2010020600
ARCHITECT
05-03-2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

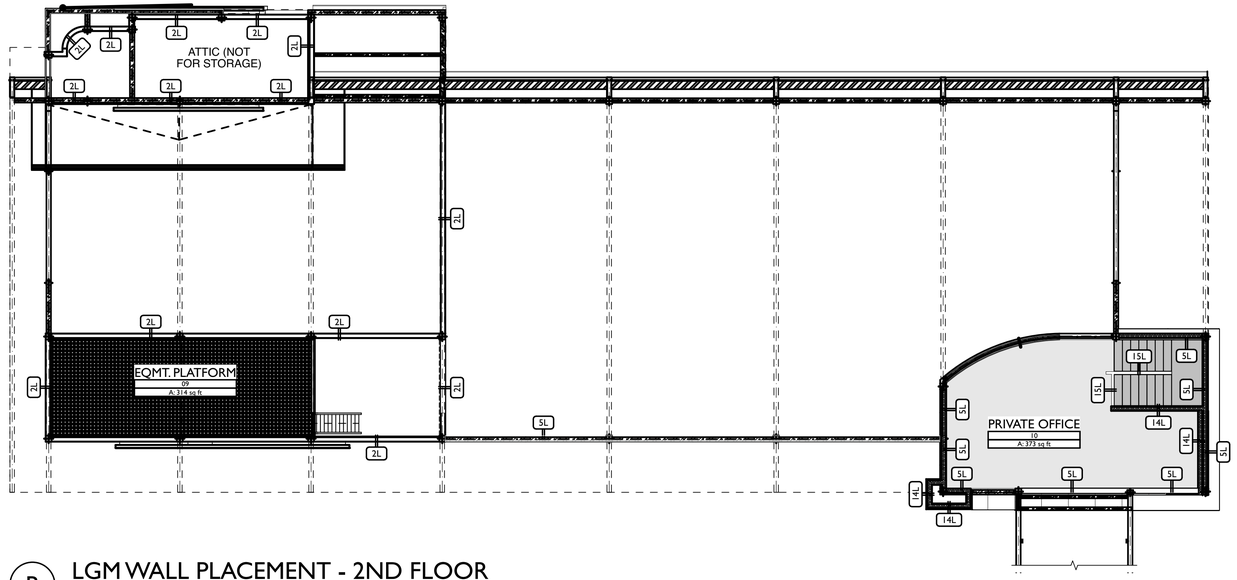
PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

SHEET:
MW-1.4
ROOF PANEL CUTSHEETS

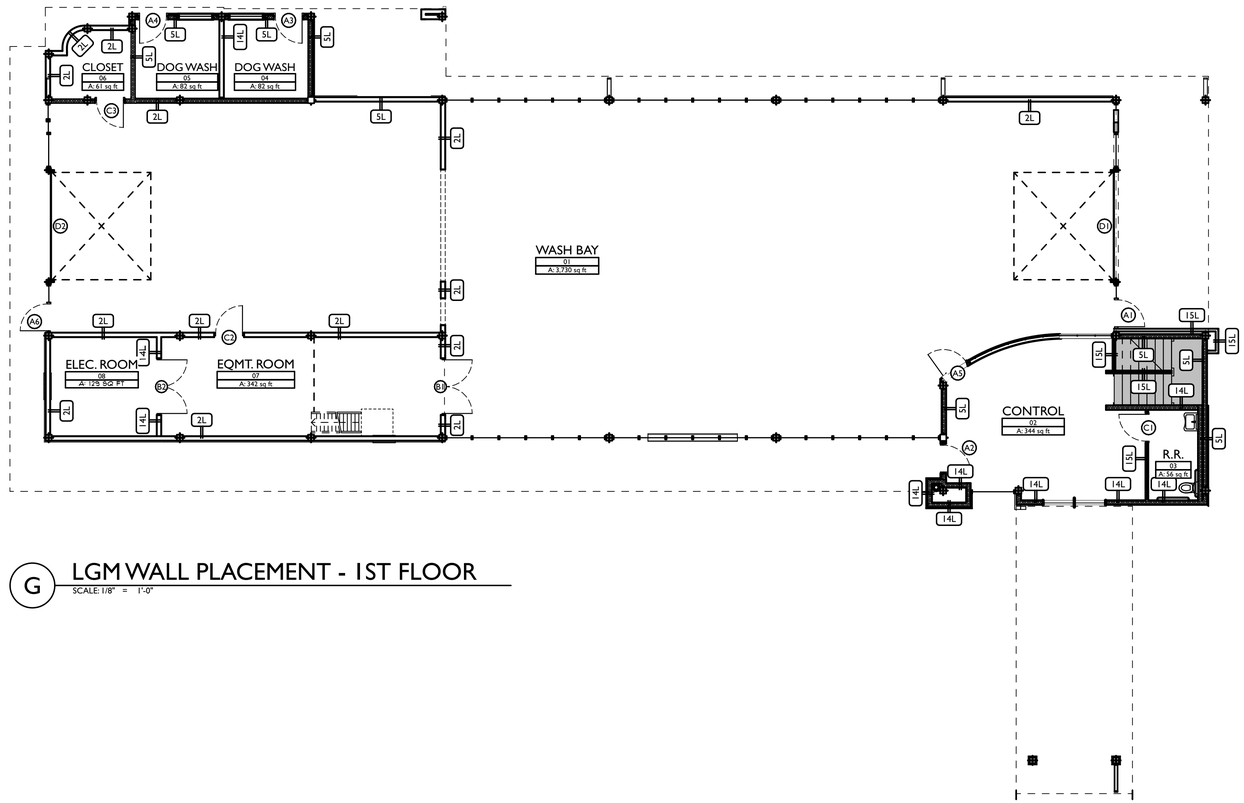


NOTE:
INTERIOR BUILDING WALL PLACEMENT ASSUMES THE WASH BAY IS CONSIDERED TO BE THE EXTERIOR SIDE OF THE WALL.

SHEATHING, FINISH, AND INSULATION IS NOT SHOWN FOR CLARITY. SEE WALL TYPE DETAILS FOR ACTUAL WALL COMPOSITION.



B LGM WALL PLACEMENT - 2ND FLOOR
SCALE: 1/8" = 1'-0"



G LGM WALL PLACEMENT - 1ST FLOOR
SCALE: 1/8" = 1'-0"

DATE OF CREATION: 09/09/2021 MW JOB #: 2022-21

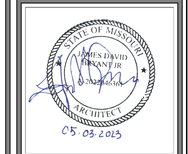
REVISIONS		
ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

11 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

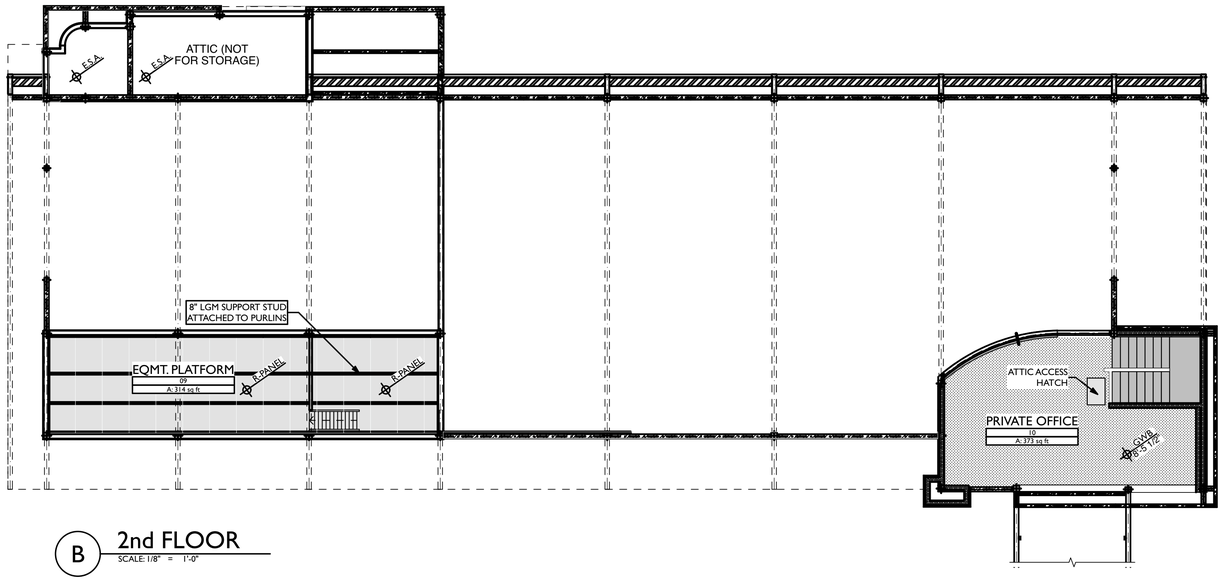


USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

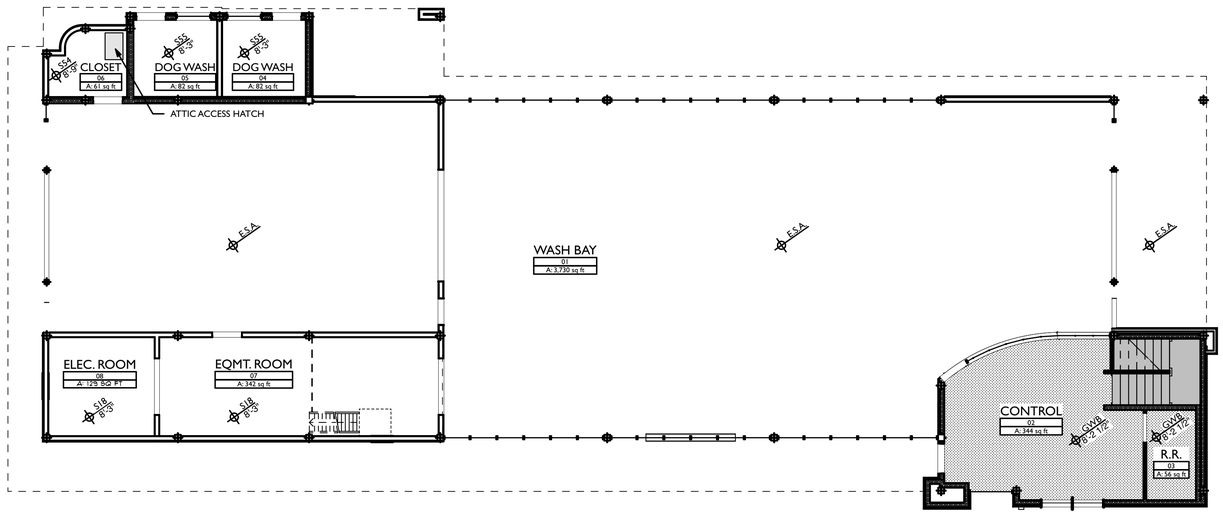
PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	TL

SHEET:
MW-1.5
LGM WALL PLACEMENT



B 2nd FLOOR
SCALE: 1/8" = 1'-0"



G 1st FLOOR
SCALE: 1/8" = 1'-0"

DATE OF CREATION: 09/09/2021 MW JOB #: 2022-21

REVISIONS			
ID	DATE	DESCRIPTION	
0	05/03/2023	FOR PERMIT	

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

12 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

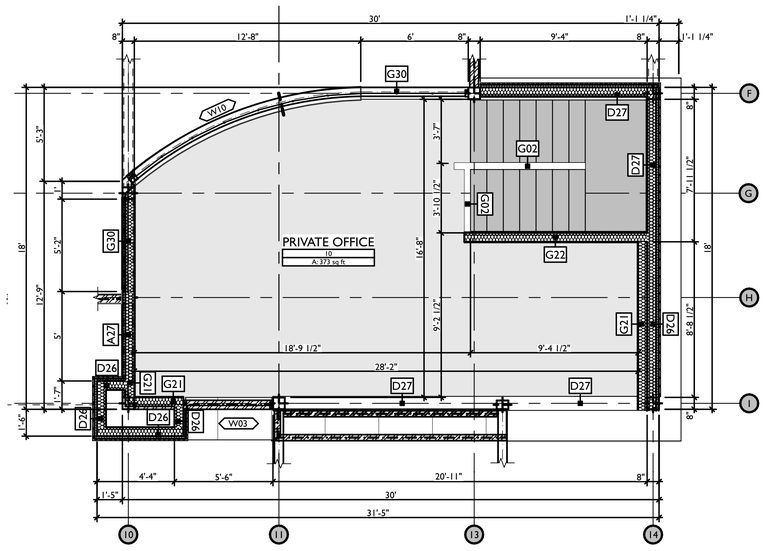
STATE OF MISSOURI
JAMES DAVID ORGANTIN JR
2010020620
ARCHITECT
05.03.2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

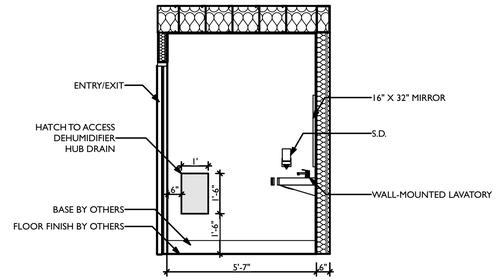
PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	TL

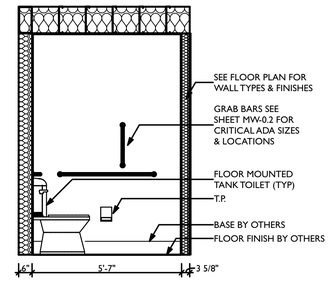
SHEET:
MW-2.1
REFLECTED CEILING PLANS

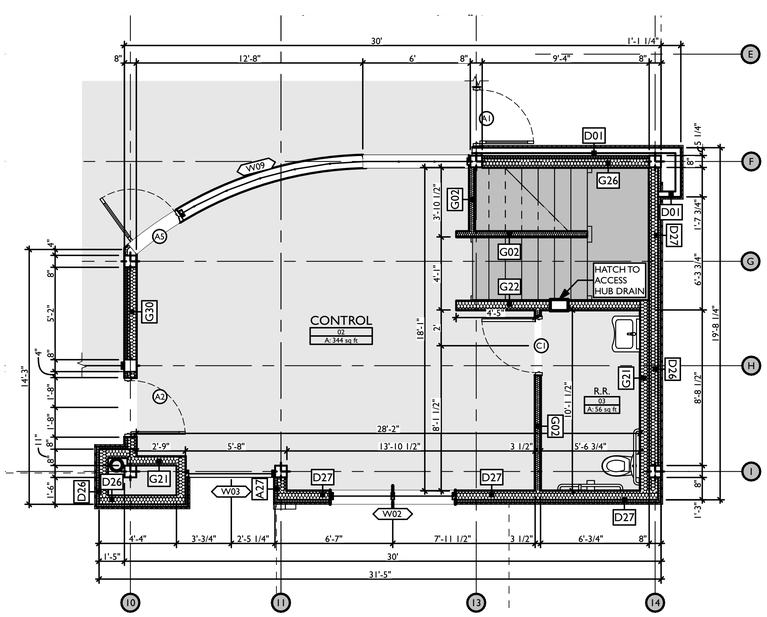


C CONTROL TOWER - 2ND FLOOR

SCALE: 1/4" = 1'-0"

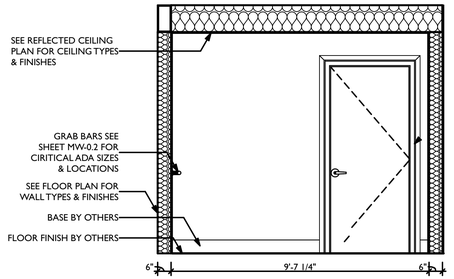


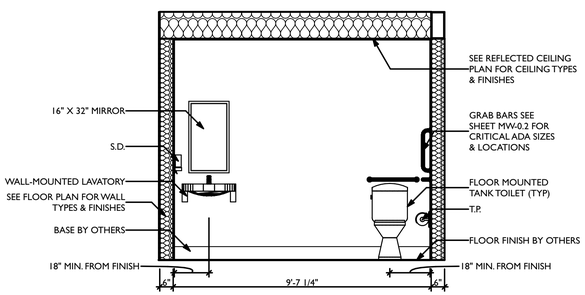




H CONTROL TOWER - 1ST FLOOR

SCALE: 1/4" = 1'-0"





E R.R. ENLARGED ELEVATIONS

SCALE: 3/8" = 1'-0"

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

13 OF 39

NEW CAR WASH FOR:

TUNNEL VISION CAR WASH

20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JAMES EDWIN GRANT III
ARCHITECT
05.03.2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

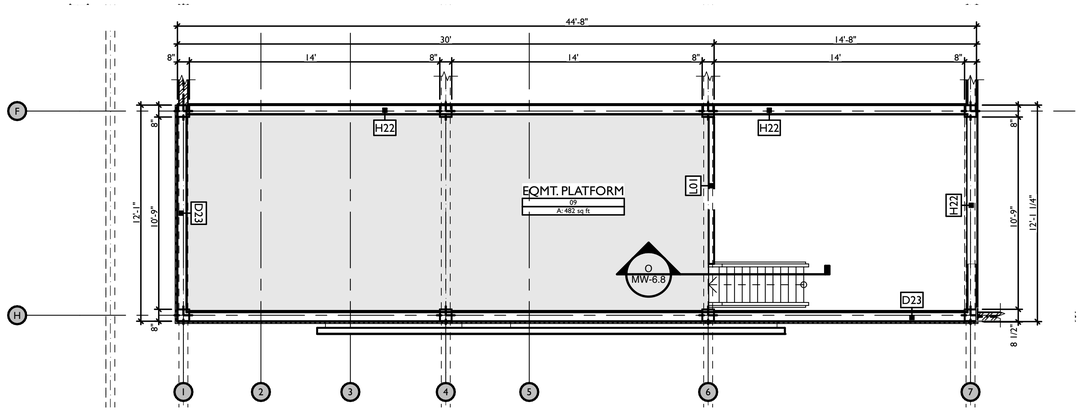
PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	TL

SHEET:

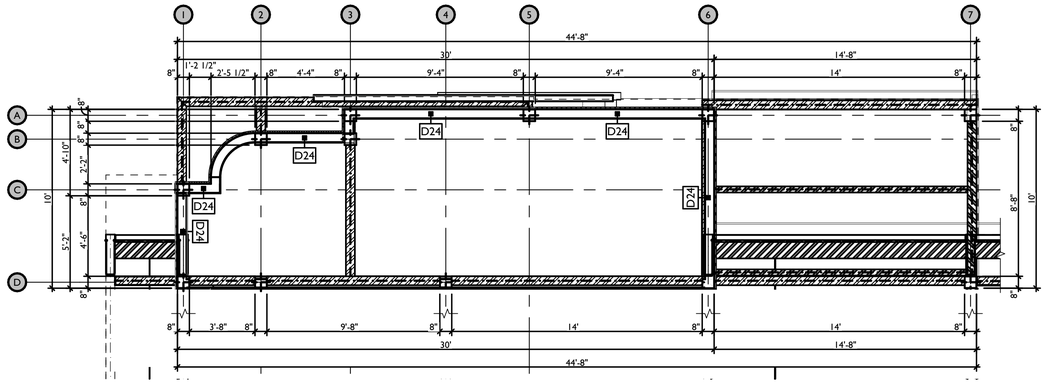
MW-3.1

ENLARGED PLANS

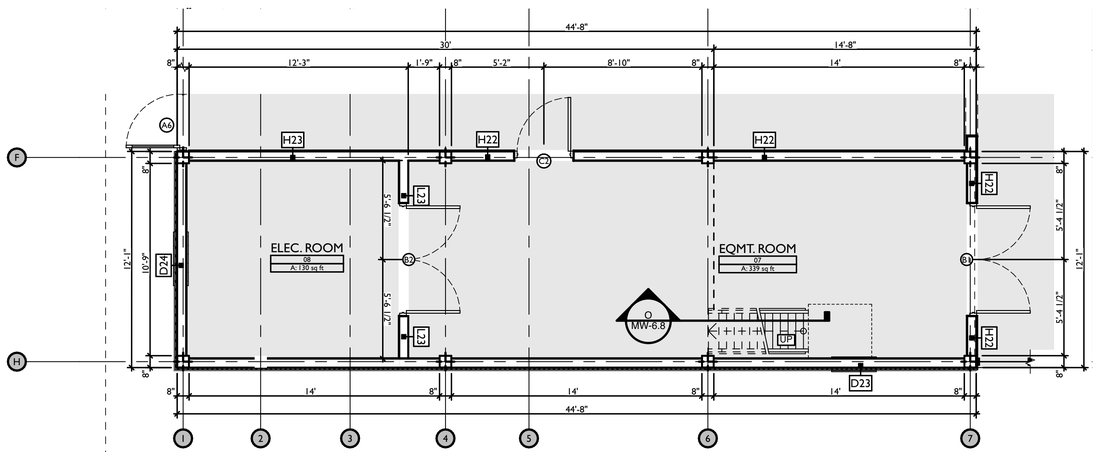
DATE OF CREATION: 09/09/2021 MW JOB #: 2022-21



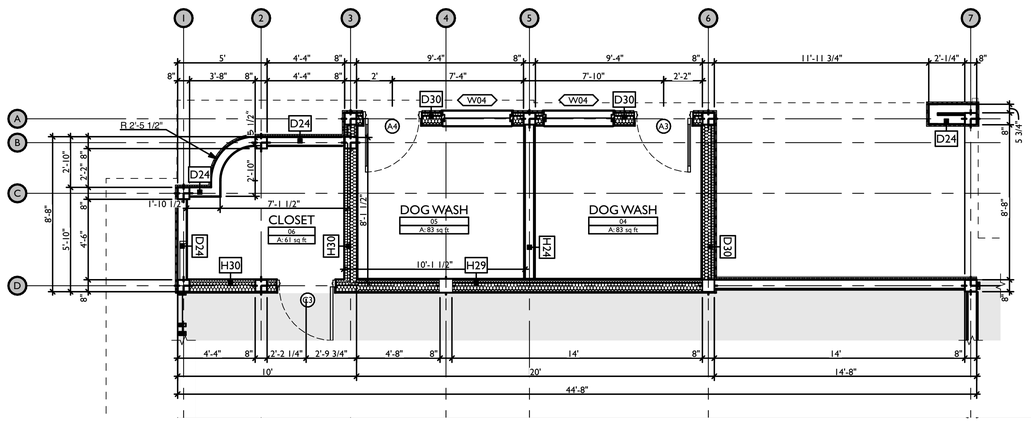
A EQMT. ROOM - PLATFORM
SCALE: 1/4" = 1'-0"



C DOG WASH TOWER - 2ND FLOOR
SCALE: 1/4" = 1'-0"



K EQMT. ROOM - 1ST FLOOR
SCALE: 1/4" = 1'-0"



M DOG WASH TOWER - 1ST FLOOR
SCALE: 1/4" = 1'-0"

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

REVISIONS		
ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

14 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

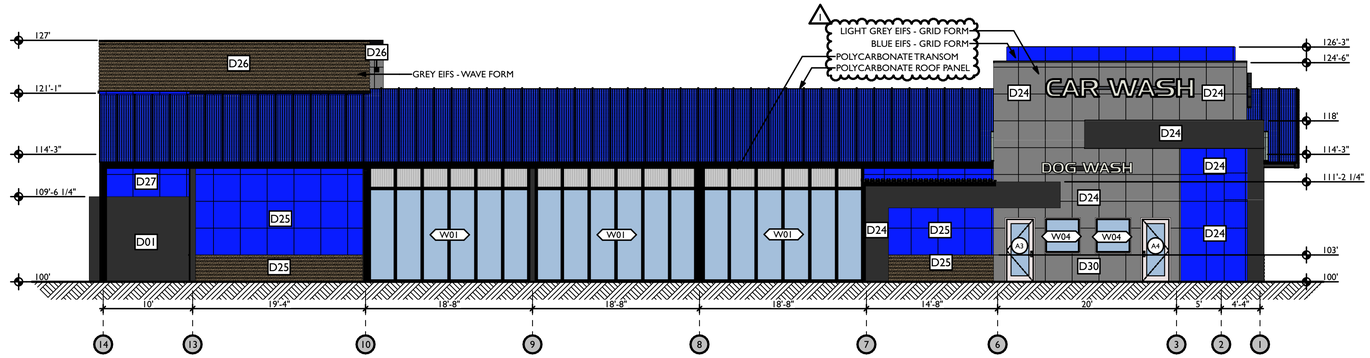
PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

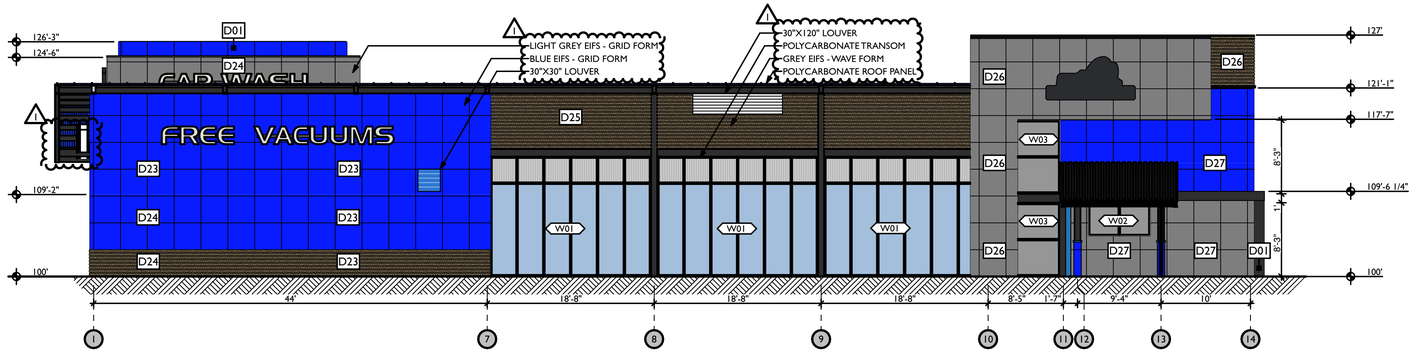
SHEET:
MW-3.2
ENLARGED PLANS

NOTE: EIFS GRID SPACING IN ELEVATIONS IS GENERIC. SEE EIFS LAYOUT FOR FINAL PANEL PLACEMENT & SPACING.

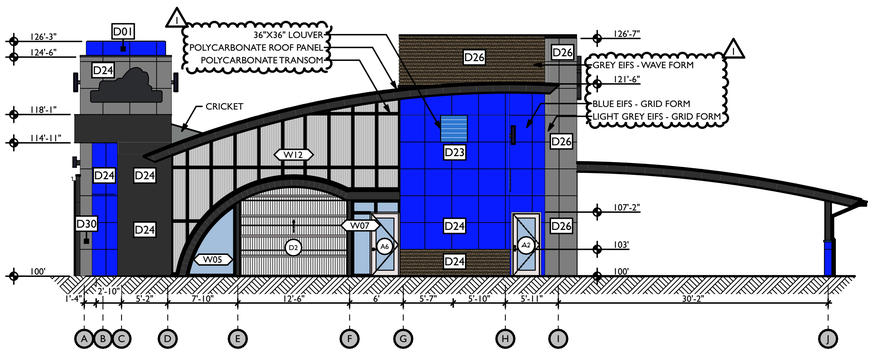
MATERIAL SCHEDULE
LIGHT GREY EIFS - GRID FORM (PANTONE 2330C)
BLUE EIFS - GRID FORM (PANTONE 2144C)
GREY EIFS - WAVE FORM (PANTONE 2330C)
BLACK EIFS - GRID FORM
BLUE POLYCARBONATE ROOF
TRANSLUCENT POLYCARBONATE
GLASS



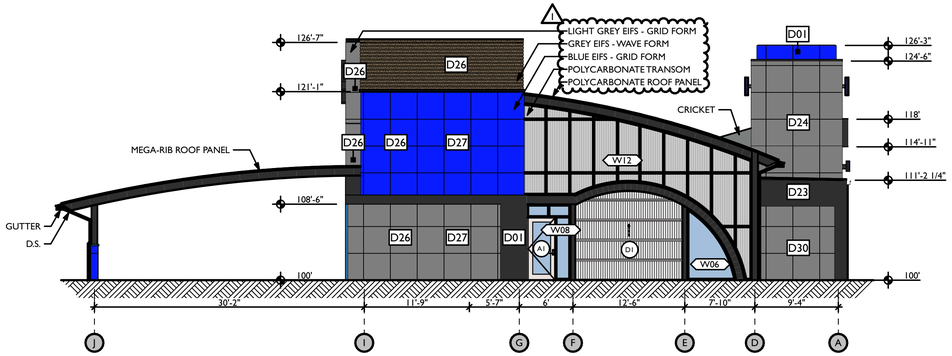
A ELEVATION - NORTH
SCALE: 1/8" = 1'-0"



G ELEVATION - SOUTH
SCALE: 1/8" = 1'-0"



K ELEVATION - WEST
SCALE: 1/8" = 1'-0"



M ELEVATION - EAST
SCALE: 1/8" = 1'-0"

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT
1	08/09/2023	DRAWING TRENCH UPDATE

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

15 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

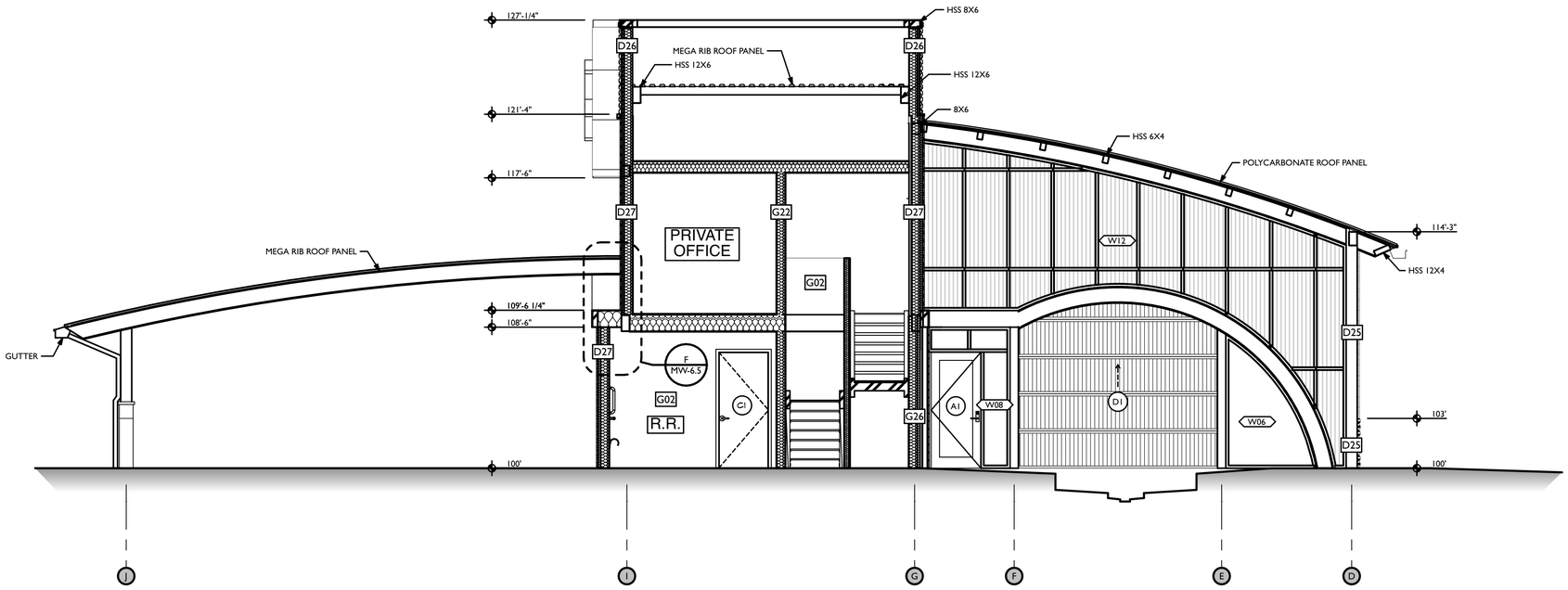
USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

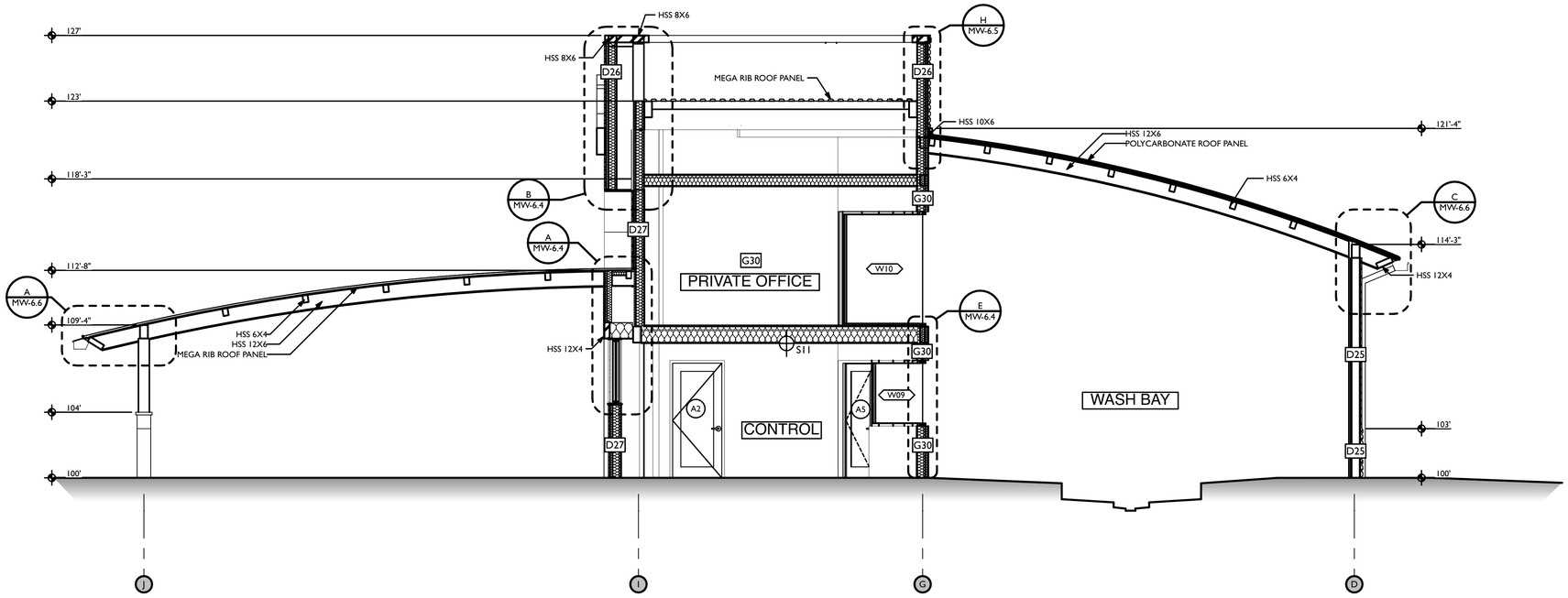
SHEET:
MW-4.1
ELEVATIONS

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21



A SECTION - WASH BAY / CONTROL TOWER

SCALE: 1/4" = 1'-0"



K SECTION - WASH BAY / CONTROL TOWER

SCALE: 1/4" = 1'-0"

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

16 OF 39

NEW CAR WASH FOR:

TUNNEL VISION CAR WASH

20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JAMES DAVID
VERSANT JR
2010020727
ARCHITECT
05.03.2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

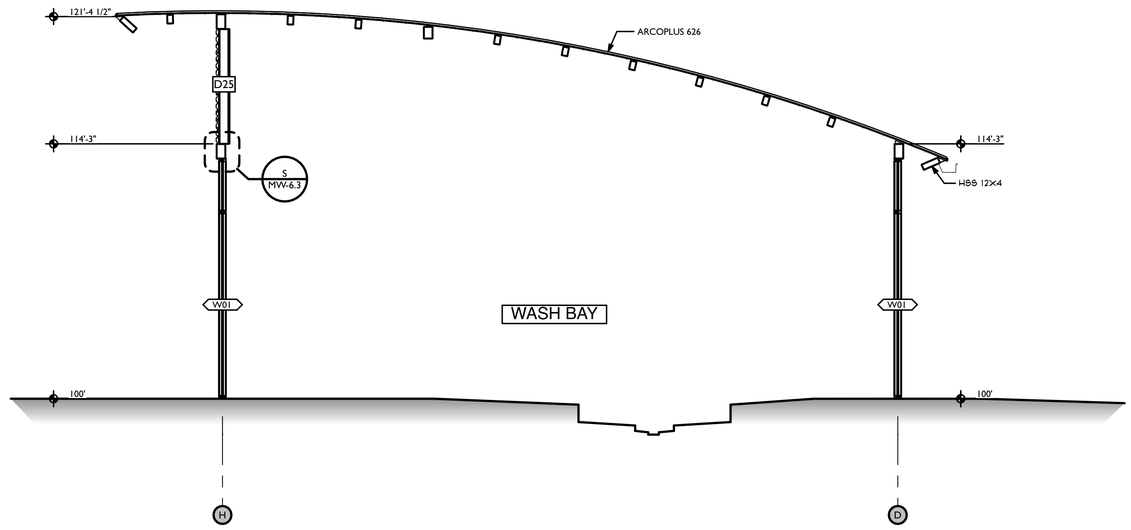
PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

SHEET:

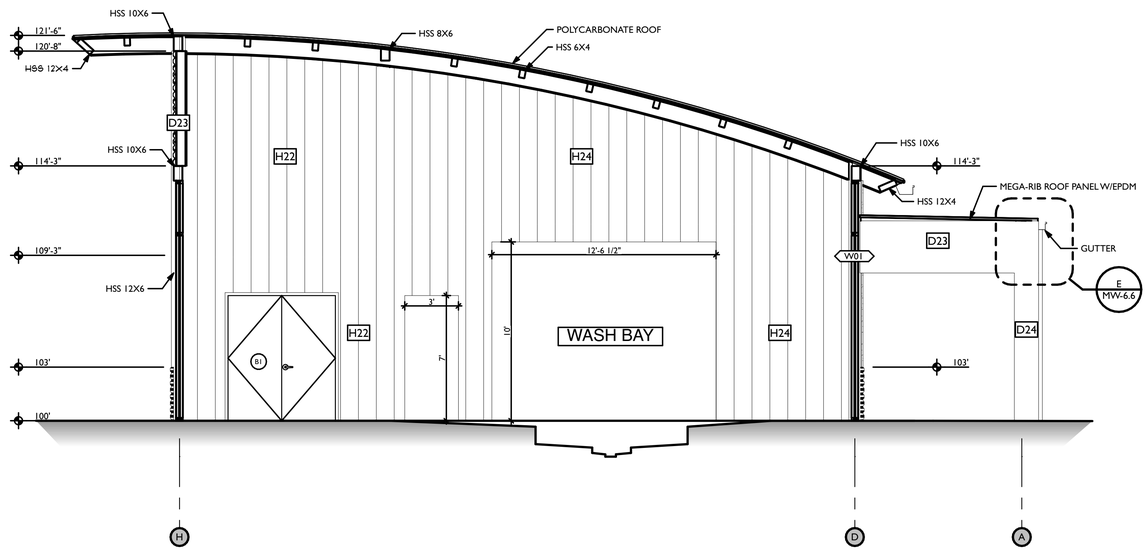
MW-5.1

SECTIONS



C SECTION - WASH BAY

SCALE: 1/4" = 1'-0"



M SECTION - WASH BAY FACING DIVISOR WALL

SCALE: 1/4" = 1'-0"

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

17 OF 39

NEW CAR WASH FOR:

TUNNEL VISION CAR WASH

20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JAMES DAVID FORANT JR
2013020127
ARCHITECT
05-03-2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

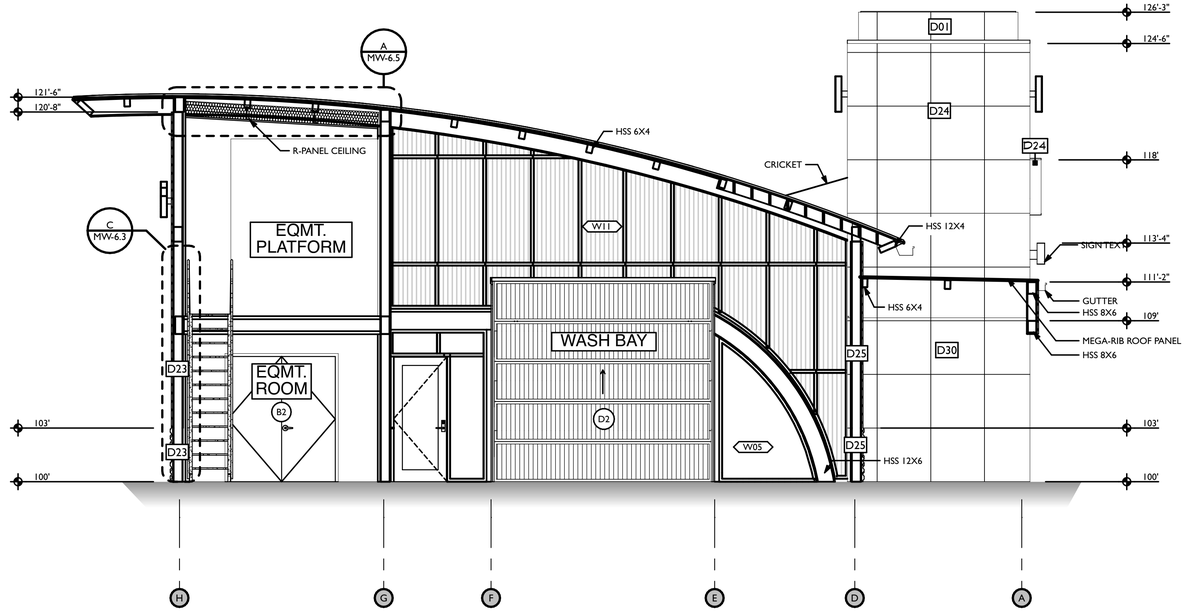
PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

SHEET:

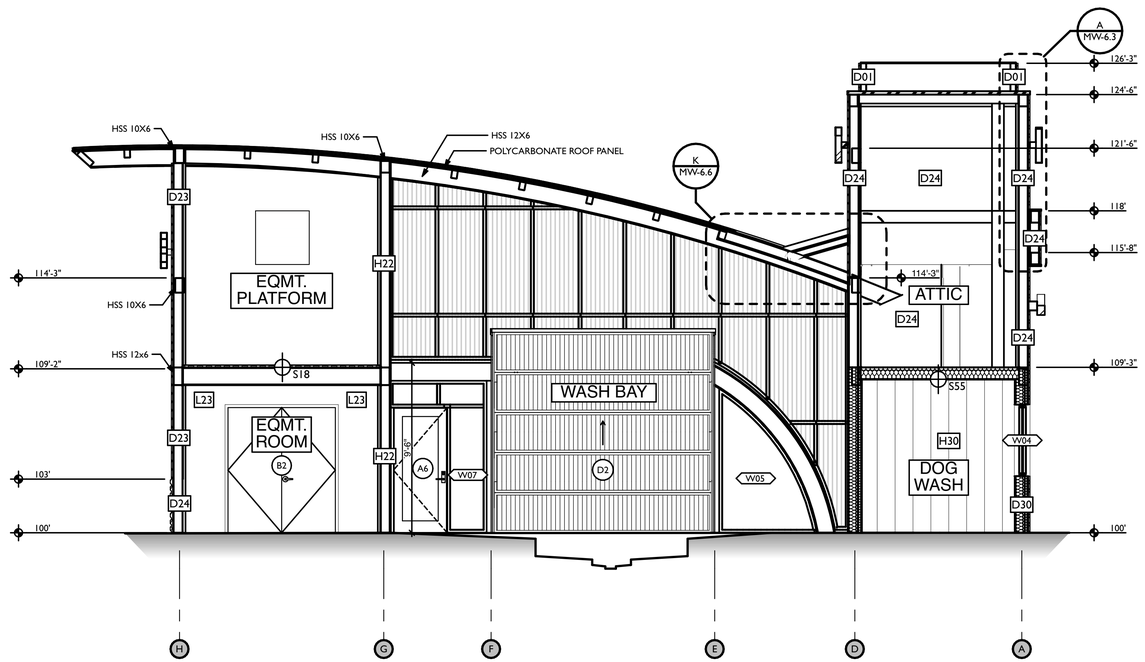
MW-5.2

SECTIONS



C SECTION - EQMT. ROOM / WASH BAY

SCALE: 1/4" = 1'-0"



H SECTION - EQMT. ROOM / WASH BAY / DOG WASH

SCALE: 1/4" = 1'-0"

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

18 OF 39

NEW CAR WASH FOR:

TUNNEL VISION CAR WASH

20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JAMES DAVID MORGANT JR
2010020736
ARCHITECT
05.03.2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

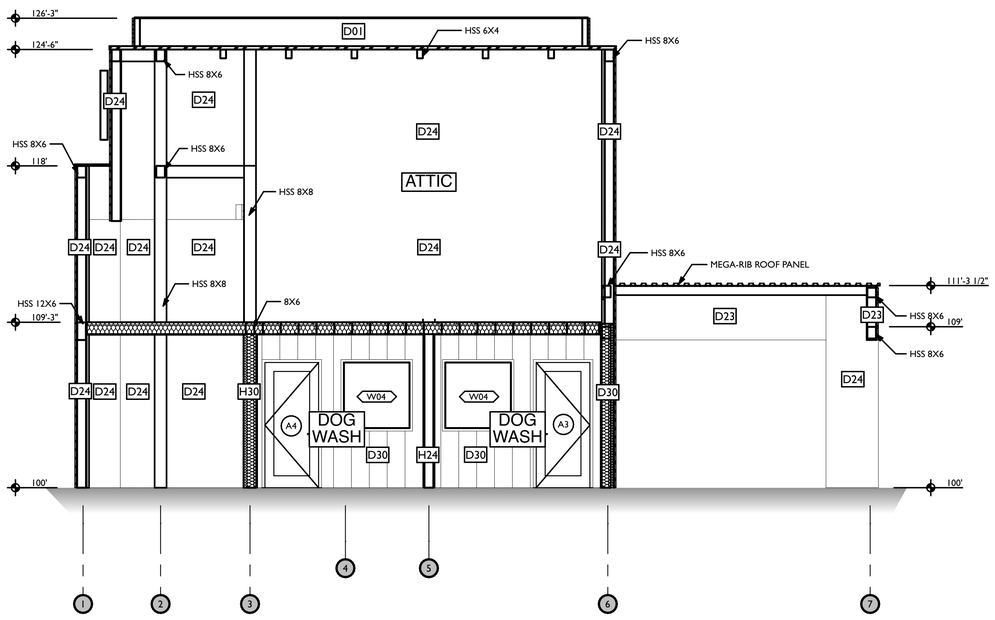
PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

SHEET:

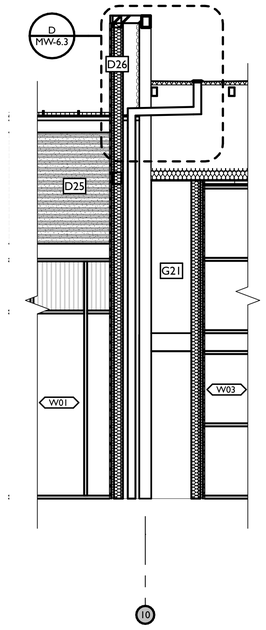
MW-5.3

SECTIONS



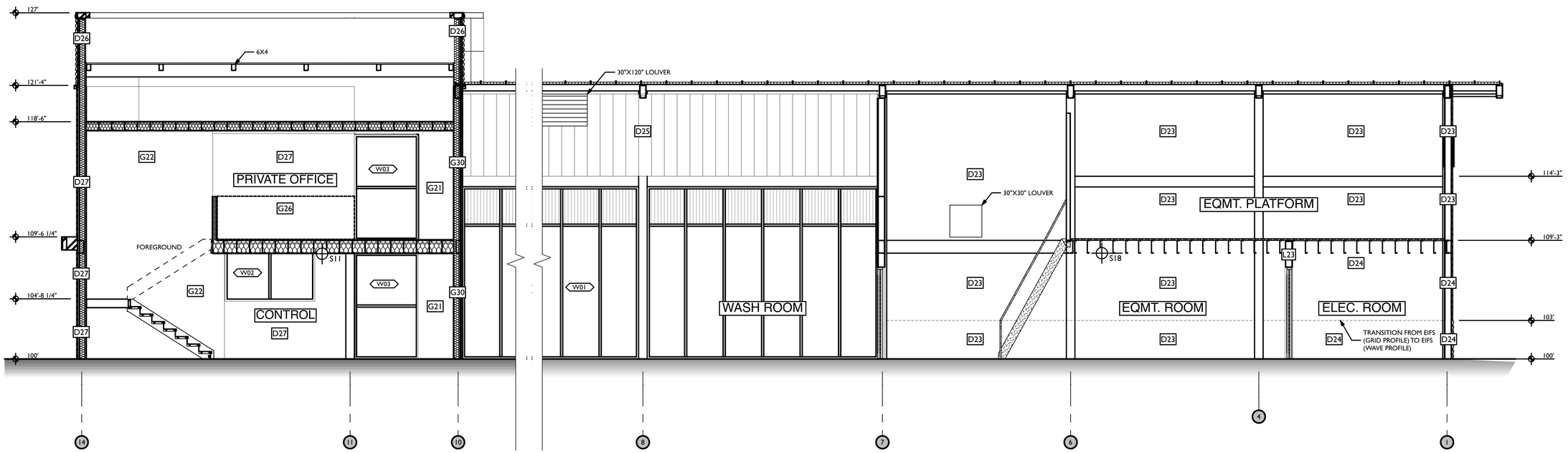
A SECTION - CLOSET / DOG WASH

SCALE: 1/4" = 1'-0"



C SECTION DETAIL - CTRL. TOWER BUMP OUT

SCALE: 1/4" = 1'-0"



K SECTION - CTRL. ROOM / WASH BAY / EQMT. ROOM

SCALE: 1/4" = 1'-0"

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

19 OF 39

NEW CAR WASH FOR:

TUNNEL VISION CAR WASH

20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JAMES DAVID FORANEY JR
2010020104
ARCHITECT
05-03-2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

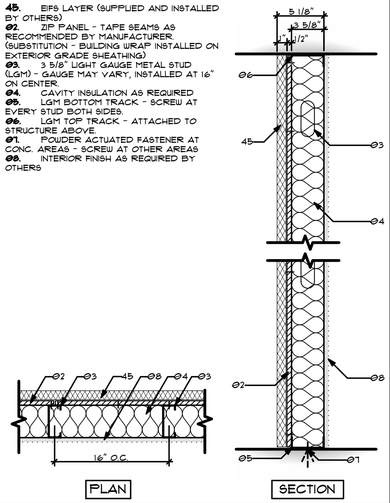
SHEET:

MW-5.4

SECTIONS

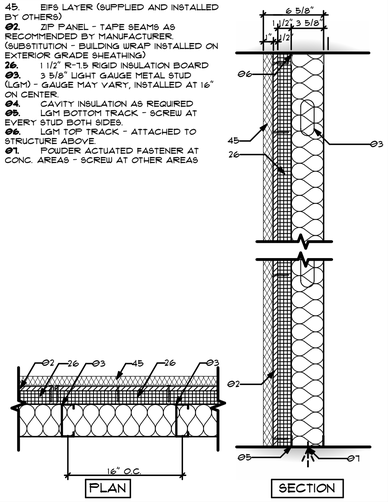
D01 | EIFS | LGM 3 5/8"

01. EIFS LAYER (SUPPLIED AND INSTALLED BY OTHERS)
02. ZIP PANEL - TAPE SEAMS AS RECOMMENDED BY MANUFACTURER. (SUBSTITUTION - BUILDING WRAP INSTALLED ON EXTERIOR GRADE SHEATHING)
03. 3 5/8" LIGHT GAUGE METAL STUD (LGM) - GAUGE MAY VARY, INSTALLED AT 16" ON CENTER.
04. CAVITY INSULATION AS REQUIRED
05. LGM BOTTOM TRACK - SCREW AT EVERY STUD BOTH SIDES.
06. LGM TOP TRACK - ATTACHED TO STRUCTURE ABOVE.
07. POWDER ACTUATED FASTENER AT CONC. AREAS - SCREW AT OTHER AREAS
08. INTERIOR FINISH AS REQUIRED BY OTHERS



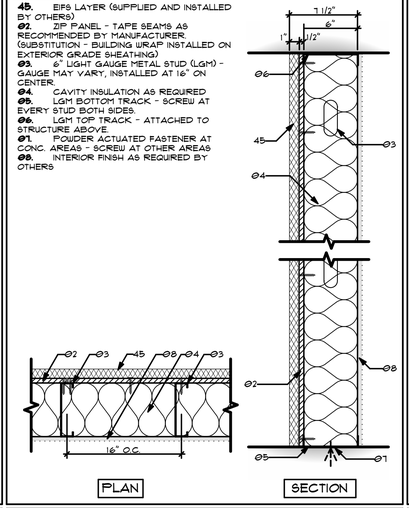
D06 | EIFS | INSUL | LGM 3 5/8"

01. EIFS LAYER (SUPPLIED AND INSTALLED BY OTHERS)
02. ZIP PANEL - TAPE SEAMS AS RECOMMENDED BY MANUFACTURER. (SUBSTITUTION - BUILDING WRAP INSTALLED ON EXTERIOR GRADE SHEATHING)
26. 1 1/2" R-7.5 RIGID INSULATION BOARD
03. 3 5/8" LIGHT GAUGE METAL STUD (LGM) - GAUGE MAY VARY, INSTALLED AT 16" ON CENTER.
04. CAVITY INSULATION AS REQUIRED
05. LGM BOTTOM TRACK - SCREW AT EVERY STUD BOTH SIDES.
06. LGM TOP TRACK - ATTACHED TO STRUCTURE ABOVE.
07. POWDER ACTUATED FASTENER AT CONC. AREAS - SCREW AT OTHER AREAS



D21 | EIFS | LGM 6"

01. EIFS LAYER (SUPPLIED AND INSTALLED BY OTHERS)
02. ZIP PANEL - TAPE SEAMS AS RECOMMENDED BY MANUFACTURER. (SUBSTITUTION - BUILDING WRAP INSTALLED ON EXTERIOR GRADE SHEATHING)
03. 6" LIGHT GAUGE METAL STUD (LGM) - GAUGE MAY VARY, INSTALLED AT 16" ON CENTER.
04. CAVITY INSULATION AS REQUIRED
05. LGM BOTTOM TRACK - SCREW AT EVERY STUD BOTH SIDES.
06. LGM TOP TRACK - ATTACHED TO STRUCTURE ABOVE.
07. POWDER ACTUATED FASTENER AT CONC. AREAS - SCREW AT OTHER AREAS
08. INTERIOR FINISH AS REQUIRED BY OTHERS



D23 | EIFS | LGM 6" | LP

01. EIFS LAYER (SUPPLIED AND INSTALLED BY OTHERS)
02. ZIP PANEL - TAPE SEAMS AS RECOMMENDED BY MANUFACTURER. (SUBSTITUTION - BUILDING WRAP INSTALLED ON EXTERIOR GRADE SHEATHING)
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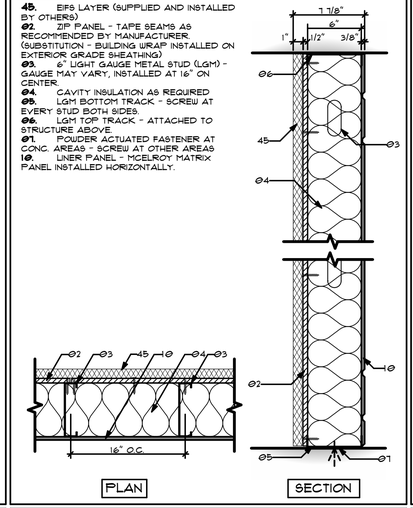
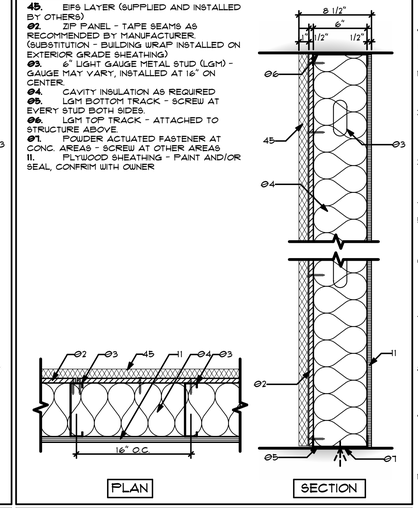
04. CAVITY INSULATION AS REQUIRED
05. LGM BOTTOM TRACK - SCREW AT EVERY STUD BOTH SIDES.
06. LGM TOP TRACK - ATTACHED TO STRUCTURE ABOVE.
07. POWDER ACTUATED FASTENER AT CONC. AREAS - SCREW AT OTHER AREAS
10. LINER PANEL - MCELROY MATRIX PANEL INSTALLED HORIZONTALLY.



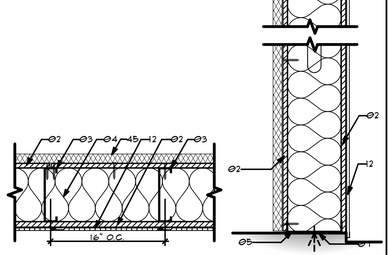
D24 | EIFS | LGM 6" | PLY

01. EIFS LAYER (SUPPLIED AND INSTALLED BY OTHERS)
02. ZIP PANEL - TAPE SEAMS AS RECOMMENDED BY MANUFACTURER. (SUBSTITUTION - BUILDING WRAP INSTALLED ON EXTERIOR GRADE SHEATHING)
03. 6" LIGHT GAUGE METAL STUD (LGM) - GAUGE MAY VARY, INSTALLED AT 16" ON CENTER.
04. CAVITY INSULATION AS REQUIRED
05. LGM BOTTOM TRACK - SCREW AT EVERY STUD BOTH SIDES.
06. LGM TOP TRACK - ATTACHED TO STRUCTURE ABOVE.
07. POWDER ACTUATED FASTENER AT CONC. AREAS - SCREW AT OTHER AREAS
11. PLYWOOD SHEATHING - PAINT AND/OR SEAL, CONFIRM WITH OWNER



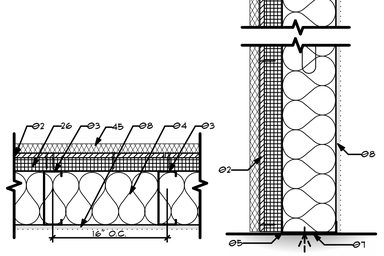
D25 | EIFS | LGM 6" | PVC

01. EIFS LAYER (SUPPLIED AND INSTALLED BY OTHERS)
02. ZIP PANEL - TAPE SEAMS AS RECOMMENDED BY MANUFACTURER. (SUBSTITUTION - BUILDING WRAP INSTALLED ON EXTERIOR GRADE SHEATHING)
03. 6" LIGHT GAUGE METAL STUD (LGM) - GAUGE MAY VARY, INSTALLED AT 16" ON CENTER.
04. CAVITY INSULATION AS REQUIRED
05. LGM BOTTOM TRACK - SCREW AT EVERY STUD BOTH SIDES.
06. LGM TOP TRACK - ATTACHED TO STRUCTURE ABOVE.
07. POWDER ACTUATED FASTENER AT CONC. AREAS - SCREW AT OTHER AREAS.
02. ZIP PANEL - TAPE SEAMS AS RECOMMENDED BY MANUFACTURER. (SUBSTITUTION - BUILDING WRAP INSTALLED ON EXTERIOR GRADE SHEATHING)
12. PVC PANEL - INSTALL VERTICALLY FULL HEIGHT.



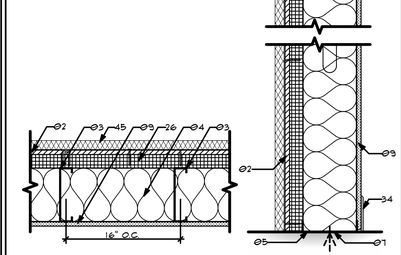
D26 | EIFS | 2" INSUL | LGM 6"

01. EIFS LAYER (SUPPLIED AND INSTALLED BY OTHERS)
02. ZIP PANEL - TAPE SEAMS AS RECOMMENDED BY MANUFACTURER. (SUBSTITUTION - BUILDING WRAP INSTALLED ON EXTERIOR GRADE SHEATHING)
26. 2" R-7.5 RIGID INSULATION BOARD
03. 6" LIGHT GAUGE METAL STUD (LGM) - GAUGE MAY VARY, INSTALLED AT 16" ON CENTER.
04. CAVITY INSULATION AS REQUIRED
05. LGM BOTTOM TRACK - SCREW AT EVERY STUD BOTH SIDES.
06. LGM TOP TRACK - ATTACHED TO STRUCTURE ABOVE.
07. POWDER ACTUATED FASTENER AT CONC. AREAS - SCREW AT OTHER AREAS
08. INTERIOR FINISH AS REQUIRED BY OTHERS



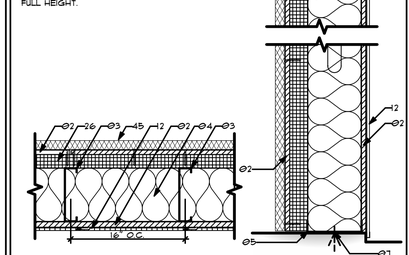
D27 | EIFS | 1 1/2" INSUL | LGM 6" | GWB

01. EIFS LAYER (SUPPLIED AND INSTALLED BY OTHERS)
02. ZIP PANEL - TAPE SEAMS AS RECOMMENDED BY MANUFACTURER. (SUBSTITUTION - BUILDING WRAP INSTALLED ON EXTERIOR GRADE SHEATHING)
26. 1 1/2" R-7.5 RIGID INSULATION BOARD
03. 6" LIGHT GAUGE METAL STUD (LGM) - GAUGE MAY VARY, INSTALLED AT 16" ON CENTER.
04. CAVITY INSULATION AS REQUIRED
05. LGM BOTTOM TRACK - SCREW AT EVERY STUD BOTH SIDES.
06. LGM TOP TRACK - ATTACHED TO STRUCTURE ABOVE.
07. POWDER ACTUATED FASTENER AT CONC. AREAS - SCREW AT OTHER AREAS
09. GYPSUM WALL BOARD - TAPE, TEXTURE, MUD, SMOOTH, FINISH (SUPPLIED AND INSTALLED BY OTHERS)
34. BASE AS REQ. - CONFIRM TYPE & FINISH WITH OWNER



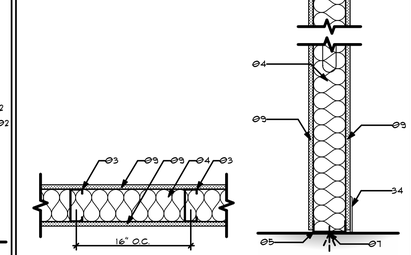
D30 | EIFS | 2" INSUL | LGM 6" | PVC

01. EIFS LAYER (SUPPLIED AND INSTALLED BY OTHERS)
02. ZIP PANEL - TAPE SEAMS AS RECOMMENDED BY MANUFACTURER. (SUBSTITUTION - BUILDING WRAP INSTALLED ON EXTERIOR GRADE SHEATHING)
26. 2" R-7.5 RIGID INSULATION BOARD
03. 6" LIGHT GAUGE METAL STUD (LGM) - GAUGE MAY VARY, INSTALLED AT 16" ON CENTER.
04. CAVITY INSULATION AS REQUIRED
05. LGM BOTTOM TRACK - SCREW AT EVERY STUD BOTH SIDES.
06. LGM TOP TRACK - ATTACHED TO STRUCTURE ABOVE.
07. POWDER ACTUATED FASTENER AT CONC. AREAS - SCREW AT OTHER AREAS
09. GYPSUM WALL BOARD - TAPE, TEXTURE, MUD, SMOOTH, FINISH (SUPPLIED AND INSTALLED BY OTHERS)
02. ZIP PANEL - TAPE SEAMS AS RECOMMENDED BY MANUFACTURER. (SUBSTITUTION - BUILDING WRAP INSTALLED ON EXTERIOR GRADE SHEATHING)
12. PVC PANEL - INSTALL VERTICALLY FULL HEIGHT.



G02 | GWB | LGM 3 5/8" | GWB

09. GYPSUM WALL BOARD - TAPE, TEXTURE, MUD, SMOOTH, FINISH (SUPPLIED AND INSTALLED BY OTHERS)
03. 3 5/8" LIGHT GAUGE METAL STUD (LGM) - GAUGE MAY VARY, INSTALLED AT 16" ON CENTER.
04. CAVITY INSULATION AS REQUIRED.
05. LGM BOTTOM TRACK - SCREW AT EVERY STUD BOTH SIDES.
06. LGM TOP TRACK - ATTACHED TO STRUCTURE ABOVE.
07. POWDER ACTUATED FASTENER AT CONC. AREAS - SCREW AT OTHER AREAS
09. GYPSUM WALL BOARD - TAPE, TEXTURE, MUD, SMOOTH, FINISH (SUPPLIED AND INSTALLED BY OTHERS)
34. BASE AS REQ. - CONFIRM TYPE & FINISH WITH OWNER



G21 | GWB | LGM 6"

09. GYPSUM WALL BOARD - TAPE, TEXTURE, MUD, SMOOTH, FINISH (SUPPLIED AND INSTALLED BY OTHERS)
03. 6" LIGHT GAUGE METAL STUD (LGM) - GAUGE MAY VARY, INSTALLED AT 16" ON CENTER.
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05. LGM BOTTOM TRACK - SCREW AT EVERY STUD BOTH SIDES.
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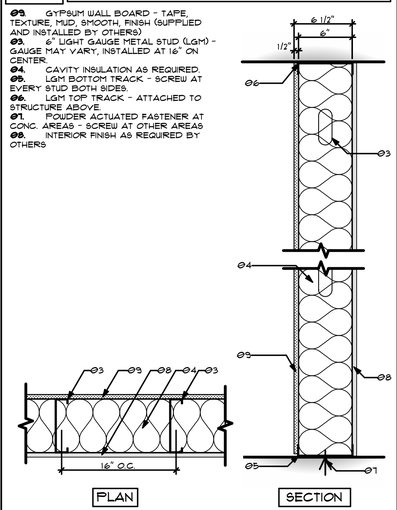
07. POWDER ACTUATED FASTENER AT CONC. AREAS - SCREW AT OTHER AREAS
08. INTERIOR FINISH AS REQUIRED BY OTHERS



G22 | GWB | LGM 6" | GWB

09. GYPSUM WALL BOARD - TAPE, TEXTURE, MUD, SMOOTH, FINISH (SUPPLIED AND INSTALLED BY OTHERS)
03. 6" LIGHT GAUGE METAL STUD (LGM) - GAUGE MAY VARY, INSTALLED AT 16" ON CENTER.
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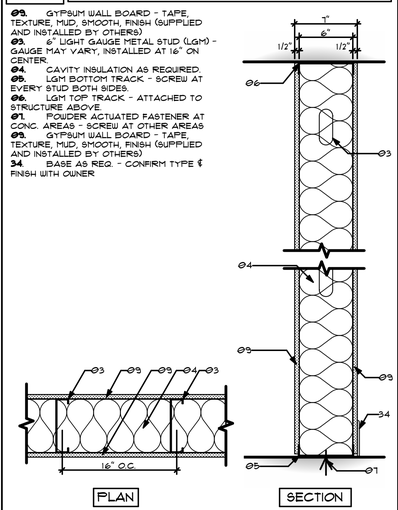
09. GYPSUM WALL BOARD - TAPE, TEXTURE, MUD, SMOOTH, FINISH (SUPPLIED AND INSTALLED BY OTHERS)
34. BASE AS REQ. - CONFIRM TYPE & FINISH WITH OWNER



G26 | GWB | LGM 6" | INSUL

09. GYPSUM WALL BOARD - TAPE, TEXTURE, MUD, SMOOTH, FINISH (SUPPLIED AND INSTALLED BY OTHERS)
03. 6" LIGHT GAUGE METAL STUD (LGM) - GAUGE MAY VARY, INSTALLED AT 16" ON CENTER.
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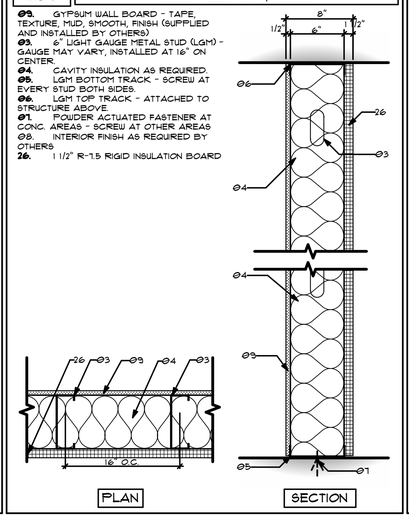
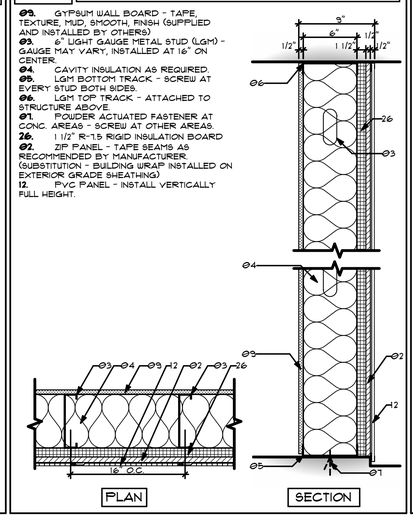
06. LGM TOP TRACK - ATTACHED TO STRUCTURE ABOVE.
07. POWDER ACTUATED FASTENER AT CONC. AREAS - SCREW AT OTHER AREAS
08. INTERIOR FINISH AS REQUIRED BY OTHERS
26. 1 1/2" R-7.5 RIGID INSULATION BOARD



G30 | GWB | LGM 6" | INSUL | PVC

09. GYPSUM WALL BOARD - TAPE, TEXTURE, MUD, SMOOTH, FINISH (SUPPLIED AND INSTALLED BY OTHERS)
03. 6" LIGHT GAUGE METAL STUD (LGM) - GAUGE MAY VARY, INSTALLED AT 16" ON CENTER.
04. CAVITY INSULATION AS REQUIRED.
05. LGM BOTTOM TRACK - SCREW AT EVERY STUD BOTH SIDES.
06. LGM TOP TRACK - ATTACHED TO STRUCTURE ABOVE.
07. POWDER ACTUATED FASTENER AT CONC. AREAS - SCREW AT OTHER AREAS.
26. 1 1/2" R-7.5 RIGID INSULATION BOARD
02. ZIP PANEL - TAPE SEAMS AS RECOMMENDED BY MANUFACTURER. (SUBSTITUTION - BUILDING WRAP INSTALLED ON EXTERIOR GRADE SHEATHING)
12. PVC PANEL - INSTALL VERTICALLY FULL HEIGHT.



H22 | PVC | LGM 6" | LP

12. PVC PANEL - INSTALL VERTICALLY FULL HEIGHT.
02. ZIP PANEL - TAPE SEAMS AS RECOMMENDED BY MANUFACTURER. (SUBSTITUTION - BUILDING WRAP INSTALLED ON EXTERIOR GRADE SHEATHING)
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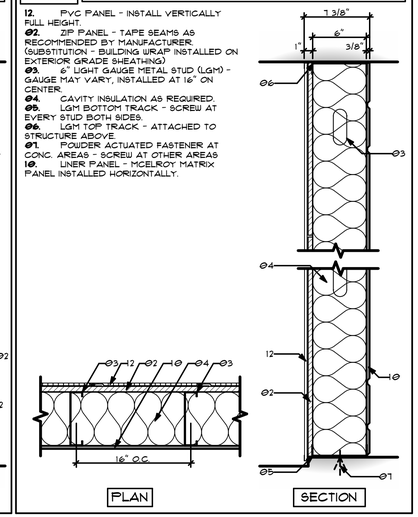
10. LINER PANEL - MCELROY MATRIX PANEL INSTALLED HORIZONTALLY.



WALL/FLOOR TYPES GENERAL NOTES:

ERECTION AND INSTALLATION BY OTHERS

NOT ALL NOTES LISTED BELOW APPLY TO EVERY PROJECT.

1. NOT ALL WALL TYPES SHOWN MAY BE USED IN THIS PROJECT. CONFIRM TYPE WITH WALL TYPE SYMBOLS ON PLANS AND SECTIONS
2. ALL FULL HEIGHT LIGHT GAUGE METAL STUD FRAMING SHALL BE BRACED TO THE ROOF STRUCTURE AND SHALL NOT BE FASTENED IN ANY WAY TO THE ROOF PANELS OR DECK.
3. SEE FLOOR PLAN AND SECTION WALL TYPE SYMBOLS FOR WALL LOCATIONS, HEIGHTS, AND ADDITIONAL INFORMATION.
4. TRACK GAUGE TO MATCH STUD GAUGE.
5. IF REQUIRED AND/OR INSTALLED, INSULATION IS TO BE CONTINUOUS FROM FLOOR TO DECK/CEILING ABOVE.
6. FRAMING CONTRACTOR SHALL PROVIDE SOLID BLOCKING CONCEALED IN WALLS AND ROUGH OPENINGS, AS REQUIRED, FOR MILLWORK SUPPORT, GRAB BARS, CLOSET SHELVING/RODS, TOILET ACCESSORIES, ETC.
7. IF SUSPENDED CEILING IS USED, ALL NON-FULL HEIGHT INTERIOR PARTITIONS ARE TO BE BRACED TO CEILING/FLOOR OR ROOF STRUCTURE ABOVE.
8. ALL SHEATHING/SUBSTRATE IS TO BE INSTALLED BASED ON THE MANUFACTURERS RECOMMENDATIONS. CONFIRM EDGE SPACING WITH MANUFACTURERS SPECIFICATIONS.
9. 1/2" ZIP PANEL IS SHOWN AS SHEATHING ON ALL WALL TYPES AS REQUIRED. THICKNESS AND TYPE OF SHEATHING MAY BE SUBSTITUTED BASED ON LOCAL BUILDING CODES (CONFIRM WITH ARCHITECT PRIOR TO MODIFICATION)
10. IF PLYWOOD OR ZIP SHEATHING IS SUBSTITUTED WITH ANOTHER SHEATHING PRODUCT, THEN THE CONTRACTOR IS RESPONSIBLE FOR THE POSSIBLE CHANGE OR MODIFICATION OF THE FINISH MATERIAL ATTACHMENT TO THE SUBSTRATE.
11. ZIP PANELS CONTAIN A BUILT-IN VAPOR BARRIER. INSTALL, TAPE, AND SEAL BASED ON MANUFACTURERS INSTALLATION GUIDE AND SPECIFICATIONS.
12. EXTEND PVC PANEL DOWN PAST EDGE OF SLAB. 1" OR MORE RECOMMENDED. 4" MAX.
13. UNLESS OTHERWISE NOTED, ALL LGM WALL STUDS ARE TO BE 18 GA
14. UNLESS OTHERWISE NOTED, ALL LGM FLOOR/CEILING JOISTS ARE TO BE 12 GA
15. UNLESS OTHERWISE NOTED, ALL 12" FLOOR JOISTS ARE TO BE ATTACHED TO STEEL FRAME STRUCTURE USING SIMPSON JOIST HANGERS AND/OR BEAR ON A STRUCTURAL WALL.
16. UNLESS OTHERWISE NOTED OR DETAILED, ALL CEILING STRUCTURES ARE TO BE ATTACHED TO THE WALL STRUCTURE BY LGM TRACK AND THE AREA ABOVE IS NOT INTENDED FOR STORAGE OR OCCUPIED SPACE.

REVISIONS		
ID	DATE	DESCRIPTION
0	05/02/2023	FOR PERMIT

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

20 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JAMES DAVID MORENO III
2012038660
ARCHITECT
05.03.2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

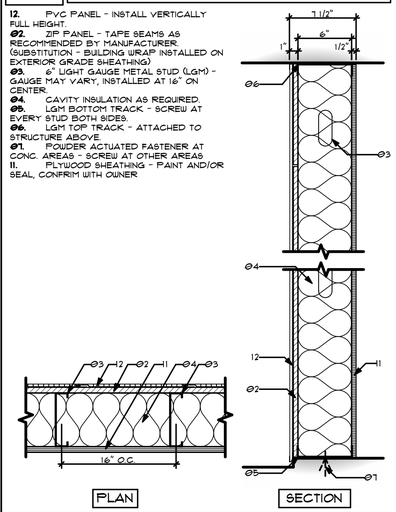
PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

SHEET:
MW-6.1
WALL TYPES

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

H23 | PVC | LGM 6" | PLY

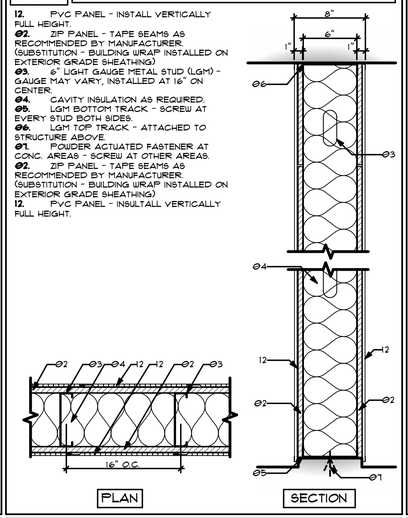
12. PVC PANEL - INSTALL VERTICALLY FULL HEIGHT.
02. ZIP PANEL - TAPE SEAMS AS RECOMMENDED BY MANUFACTURER. (SUBSTITUTION - BUILDING WRAP INSTALLED ON EXTERIOR GRADE SHEATHING)
03. 6" LIGHT GAUGE METAL STUD (LGM) - GAUGE MAY VARY, INSTALLED AT 16" ON CENTER.
04. CAVITY INSULATION AS REQUIRED.
05. LGM BOTTOM TRACK - SCREW AT EVERY STUD BOTH SIDES.
06. LGM TOP TRACK - ATTACHED TO STRUCTURE ABOVE.
07. POWDER ACTUATED FASTENER AT CONC. AREAS - SCREW AT OTHER AREAS
11. PLYWOOD SHEATHING - PAINT AND/OR SEAL, CONFIRM WITH OWNER



PLAN | SECTION

H24 | PVC | LGM 6" | PVC

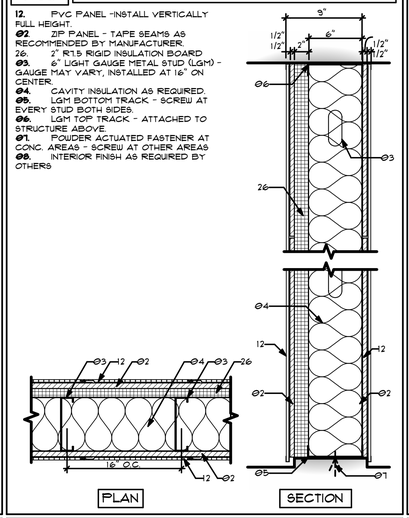
12. PVC PANEL - INSTALL VERTICALLY FULL HEIGHT.
02. ZIP PANEL - TAPE SEAMS AS RECOMMENDED BY MANUFACTURER. (SUBSTITUTION - BUILDING WRAP INSTALLED ON EXTERIOR GRADE SHEATHING)
03. 6" LIGHT GAUGE METAL STUD (LGM) - GAUGE MAY VARY, INSTALLED AT 16" ON CENTER.
04. CAVITY INSULATION AS REQUIRED.
05. LGM BOTTOM TRACK - SCREW AT EVERY STUD BOTH SIDES.
06. LGM TOP TRACK - ATTACHED TO STRUCTURE ABOVE.
07. POWDER ACTUATED FASTENER AT CONC. AREAS - SCREW AT OTHER AREAS.
02. ZIP PANEL - TAPE SEAMS AS RECOMMENDED BY MANUFACTURER. (SUBSTITUTION - BUILDING WRAP INSTALLED ON EXTERIOR GRADE SHEATHING)
12. PVC PANEL - INSULTAIL VERTICALLY FULL HEIGHT.



PLAN | SECTION

H29 | PVC | 2" INSUL | LGM 6" | PVC

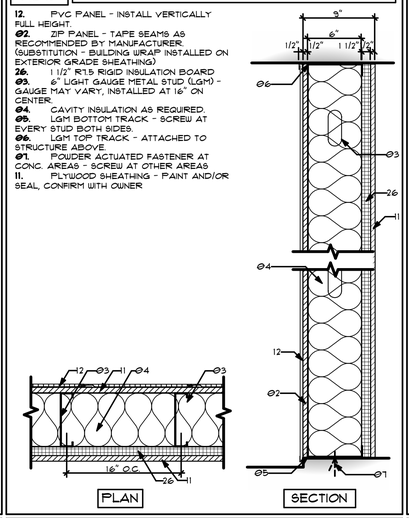
12. PVC PANEL -INSTALL VERTICALLY FULL HEIGHT.
02. ZIP PANEL - TAPE SEAMS AS RECOMMENDED BY MANUFACTURER.
26. 2" R15 RIGID INSULATION BOARD
03. 6" LIGHT GAUGE METAL STUD (LGM) - GAUGE MAY VARY, INSTALLED AT 16" ON CENTER.
04. CAVITY INSULATION AS REQUIRED.
05. LGM BOTTOM TRACK - SCREW AT EVERY STUD BOTH SIDES.
06. LGM TOP TRACK - ATTACHED TO STRUCTURE ABOVE.
07. POWDER ACTUATED FASTENER AT CONC. AREAS - SCREW AT OTHER AREAS
08. INTERIOR FINISH AS REQUIRED BY OTHERS



PLAN | SECTION

H30 | PVC | LGM 6" | INSUL | PLY

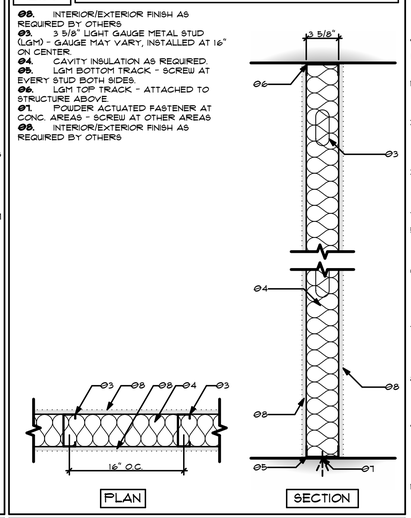
12. PVC PANEL - INSTALL VERTICALLY FULL HEIGHT.
02. ZIP PANEL - TAPE SEAMS AS RECOMMENDED BY MANUFACTURER. (SUBSTITUTION - BUILDING WRAP INSTALLED ON EXTERIOR GRADE SHEATHING)
26. 1 1/2" R15 RIGID INSULATION BOARD
03. 6" LIGHT GAUGE METAL STUD (LGM) - GAUGE MAY VARY, INSTALLED AT 16" ON CENTER.
04. CAVITY INSULATION AS REQUIRED.
05. LGM BOTTOM TRACK - SCREW AT EVERY STUD BOTH SIDES.
06. LGM TOP TRACK - ATTACHED TO STRUCTURE ABOVE.
07. POWDER ACTUATED FASTENER AT CONC. AREAS - SCREW AT OTHER AREAS
08. INTERIOR/EXTERIOR FINISH AS REQUIRED BY OTHERS



PLAN | SECTION

L01 | LGM 3 5/8"

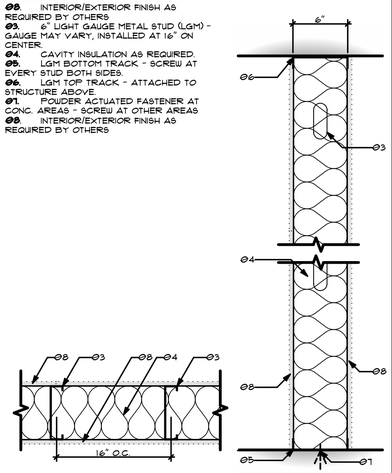
08. INTERIOR/EXTERIOR FINISH AS REQUIRED BY OTHERS
03. 3 5/8" LIGHT GAUGE METAL STUD (LGM) - GAUGE MAY VARY, INSTALLED AT 16" ON CENTER.
04. CAVITY INSULATION AS REQUIRED.
05. LGM BOTTOM TRACK - SCREW AT EVERY STUD BOTH SIDES.
06. LGM TOP TRACK - ATTACHED TO STRUCTURE ABOVE.
07. POWDER ACTUATED FASTENER AT CONC. AREAS - SCREW AT OTHER AREAS
08. INTERIOR/EXTERIOR FINISH AS REQUIRED BY OTHERS



PLAN | SECTION

L21 | LGM 6"

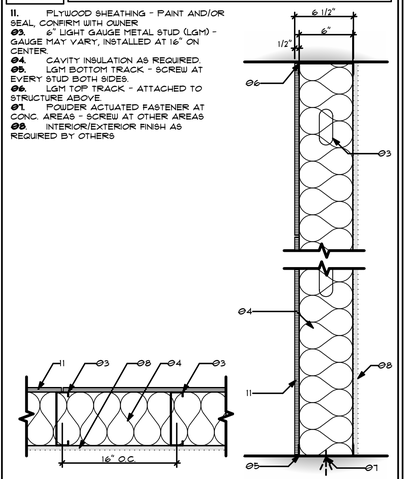
08. INTERIOR/EXTERIOR FINISH AS REQUIRED BY OTHERS
03. 6" LIGHT GAUGE METAL STUD (LGM) - GAUGE MAY VARY, INSTALLED AT 16" ON CENTER.
04. CAVITY INSULATION AS REQUIRED.
05. LGM BOTTOM TRACK - SCREW AT EVERY STUD BOTH SIDES.
06. LGM TOP TRACK - ATTACHED TO STRUCTURE ABOVE.
07. POWDER ACTUATED FASTENER AT CONC. AREAS - SCREW AT OTHER AREAS
08. INTERIOR/EXTERIOR FINISH AS REQUIRED BY OTHERS



PLAN | SECTION

L22 | PLY | LGM 6"

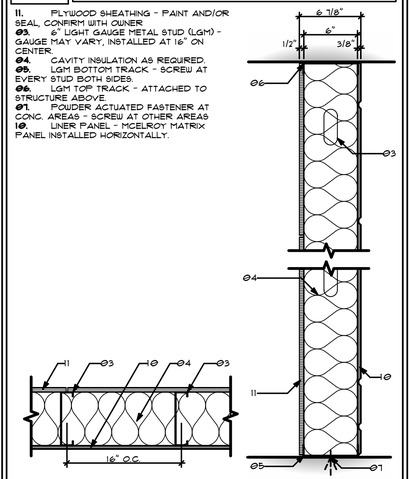
11. PLYWOOD SHEATHING - PAINT AND/OR SEAL, CONFIRM WITH OWNER
03. 6" LIGHT GAUGE METAL STUD (LGM) - GAUGE MAY VARY, INSTALLED AT 16" ON CENTER.
04. CAVITY INSULATION AS REQUIRED.
05. LGM BOTTOM TRACK - SCREW AT EVERY STUD BOTH SIDES.
06. LGM TOP TRACK - ATTACHED TO STRUCTURE ABOVE.
07. POWDER ACTUATED FASTENER AT CONC. AREAS - SCREW AT OTHER AREAS
08. INTERIOR/EXTERIOR FINISH AS REQUIRED BY OTHERS



PLAN | SECTION

L23 | PLY | LGM 6" | LP

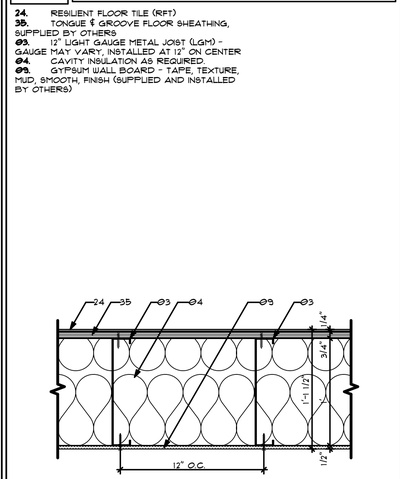
11. PLYWOOD SHEATHING - PAINT AND/OR SEAL, CONFIRM WITH OWNER
03. 6" LIGHT GAUGE METAL STUD (LGM) - GAUGE MAY VARY, INSTALLED AT 16" ON CENTER.
04. CAVITY INSULATION AS REQUIRED.
05. LGM BOTTOM TRACK - SCREW AT EVERY STUD BOTH SIDES.
06. LGM TOP TRACK - ATTACHED TO STRUCTURE ABOVE.
07. POWDER ACTUATED FASTENER AT CONC. AREAS - SCREW AT OTHER AREAS
10. LINER PANEL - MCELROY MATRIX PANEL INSTALLED HORIZONTALLY.



PLAN | SECTION

911 | RFT | PLY | LGM 12" | GWB

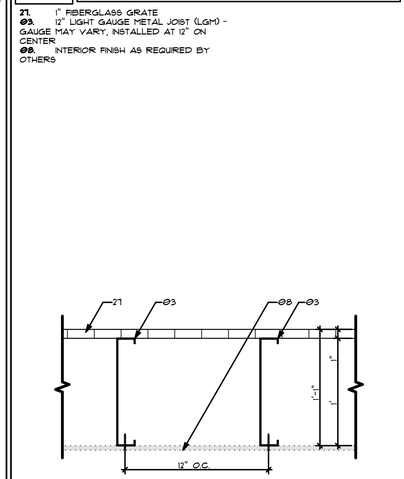
24. RESILIENT FLOOR TILE (RFT)
35. TONGUE & GROOVE FLOOR SHEATHING, SUPPLIED BY OTHERS
03. 12" LIGHT GAUGE METAL JOIST (LGM) - GAUGE MAY VARY, INSTALLED AT 12" ON CENTER
04. CAVITY INSULATION AS REQUIRED.
09. GYPSUM WALL BOARD - TAPE, TEXTURE, MUD, SMOOTH, FINISH (SUPPLIED AND INSTALLED BY OTHERS)



SECTION

S18 | GRATE 1" | LGM 12"

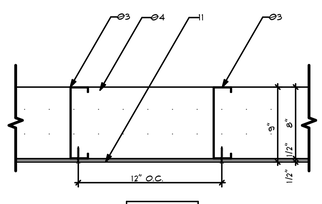
27. 1" FIBERGLASS GRATE
03. 12" LIGHT GAUGE METAL JOIST (LGM) - GAUGE MAY VARY, INSTALLED AT 12" ON CENTER
08. INTERIOR FINISH AS REQUIRED BY OTHERS



SECTION

S54 | LGM 8" | PLY

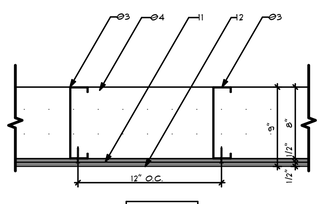
03. 8" LIGHT GAUGE METAL JOIST (LGM) - GAUGE MAY VARY, INSTALLED AT 12" ON CENTER
04. CAVITY INSULATION AS REQUIRED.
11. PLYWOOD SHEATHING - PAINT AND/OR SEAL, CONFIRM WITH OWNER



SECTION

S55 | LGM 8" | PVC

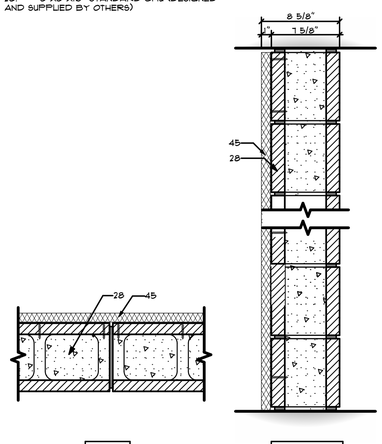
03. 8" LIGHT GAUGE METAL JOIST (LGM) - GAUGE MAY VARY, INSTALLED AT 12" ON CENTER
04. INSULATION AS REQUIRED - KRAFT FACED MINERAL BATT, RECOMMENDED.
11. PLYWOOD SHEATHING - PAINT AND/OR SEAL, CONFIRM WITH OWNER
12. TONGUE IN GROOVE PVC PANEL



SECTION

C24 | EIFS | CMU 8"

45. EIFS LAYER (SUPPLIED AND INSTALLED BY OTHERS)
28. 8"X8"X16" STANDARD CMU (DESIGNED AND SUPPLIED BY OTHERS)



PLAN | SECTION

WALL/FLOOR TYPES GENERAL NOTES:

ERECTION AND INSTALLATION BY OTHERS

NOT ALL NOTES LISTED BELOW APPLY TO EVERY PROJECT.

1. NOT ALL WALL TYPES SHOWN MAY BE USED IN THIS PROJECT. CONFIRM TYPE WITH WALL TYPE SYMBOLS ON PLANS AND SECTIONS
2. ALL FULL HEIGHT LIGHT GAUGE METAL STUD FRAMING SHALL BE BRACED TO THE ROOF STRUCTURE AND SHALL NOT BE FASTENED IN ANY WAY TO THE ROOF PANELS OR DECK.
3. SEE FLOOR PLAN AND SECTION WALL TYPE SYMBOLS FOR WALL LOCATIONS, HEIGHTS, AND ADDITIONAL INFORMATION.
4. TRACK GAUGE TO MATCH STUD GAUGE.
5. IF REQUIRED AND/OR INSTALLED, INSULATION IS TO BE CONTINUOUS FROM FLOOR TO DECK/CEILING ABOVE.
6. FRAMING CONTRACTOR SHALL PROVIDE SOLID BLOCKING CONCEALED IN WALLS AND ROUGH OPENINGS, AS REQUIRED, FOR MILLWORK SUPPORT, GRAB BARS, CLOSET SHELVING/RODS, TOILET ACCESSORIES, ETC.
7. IF SUSPENDED CEILING IS USED, ALL NON-FULL HEIGHT INTERIOR PARTITIONS ARE TO BE BRACED TO CEILING/FLOOR OR ROOF STRUCTURE ABOVE.
8. ALL SHEATHING/SUBSTRATE IS TO BE INSTALLED BASED ON THE MANUFACTURERS RECOMMENDATIONS. CONFIRM EDGE SPACING WITH MANUFACTURERS SPECIFICATIONS.
9. 1/2" ZIP PANEL IS SHOWN AS SHEATHING ON ALL WALL TYPES AS REQUIRED. THICKNESS AND TYPE OF SHEATHING MAY BE SUBSTITUTED BASED ON LOCAL BUILDING CODES (CONFIRM WITH ARCHITECT PRIOR TO MODIFICATION)
10. IF PLYWOOD OR ZIP SHEATHING IS SUBSTITUTED WITH ANOTHER SHEATHING PRODUCT, THEN THE CONTRACTOR IS RESPONSIBLE FOR THE POSSIBLE CHANGE OR MODIFICATION OF THE FINISH MATERIAL ATTACHMENT TO THE SUBSTRATE.
11. ZIP PANELS CONTAIN A BUILT-IN VAPOR BARRIER. INSTALL, TAPE, AND SEAL BASED ON MANUFACTURERS INSTALLATION GUIDE AND SPECIFICATIONS.
12. EXTEND PVC PANEL DOWN PAST EDGE OF SLAB. 1" OR MORE RECOMMENDED. 4" MAX.
13. UNLESS OTHERWISE NOTED, ALL LGM WALL STUDS ARE TO BE 18 GA
14. UNLESS OTHERWISE NOTED, ALL LGM FLOOR/CEILING JOISTS ARE TO BE 12 GA
15. UNLESS OTHERWISE NOTED, ALL 12" FLOOR JOISTS ARE TO BE ATTACHED TO STEEL FRAME STRUCTURE USING SIMPSON JOIST HANGERS AND/OR BEAR ON A STRUCTURAL WALL.
16. UNLESS OTHERWISE NOTED OR DETAILED, ALL CEILING STRUCTURES ARE TO BE ATTACHED TO THE WALL STRUCTURE BY LGM TRACK AND THE AREA ABOVE IS NOT INTENDED FOR STORAGE OR OCCUPIED SPACE.

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT
1	06/09/2023	DRAWING/TRENCH UPDATE

NOTE: THIS DESIGN DOCUMENT INCLUDES DESIGNS, DRAWINGS AND/OR RENDERINGS PREPARED FOR THE SPECIFIC PROJECT IDENTIFIED HEREIN. ALL SUCH DESIGNS, DRAWINGS AND/OR RENDERINGS ARE CONFIDENTIAL AND CONSTITUTE UNPUBLISHED WORKS OF MODERNWASH. COPYRIGHT LAWS AND INTERNATIONAL TREATIES PROTECT THE NOTICED WORKS. ANY USE OR REPRODUCTION OF THIS DESIGN AND ITS VARIOUS ELEMENTS IS STRICTLY PROHIBITED WITHOUT THE WRITTEN PERMISSION OF MODERNWASH INC. AND ILLUMINATED DESIGNS INC. RECEIPT OF THIS DOCUMENT DOES NOT TRANSFER ANY RIGHTS OF REPRODUCTION.

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MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

21 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

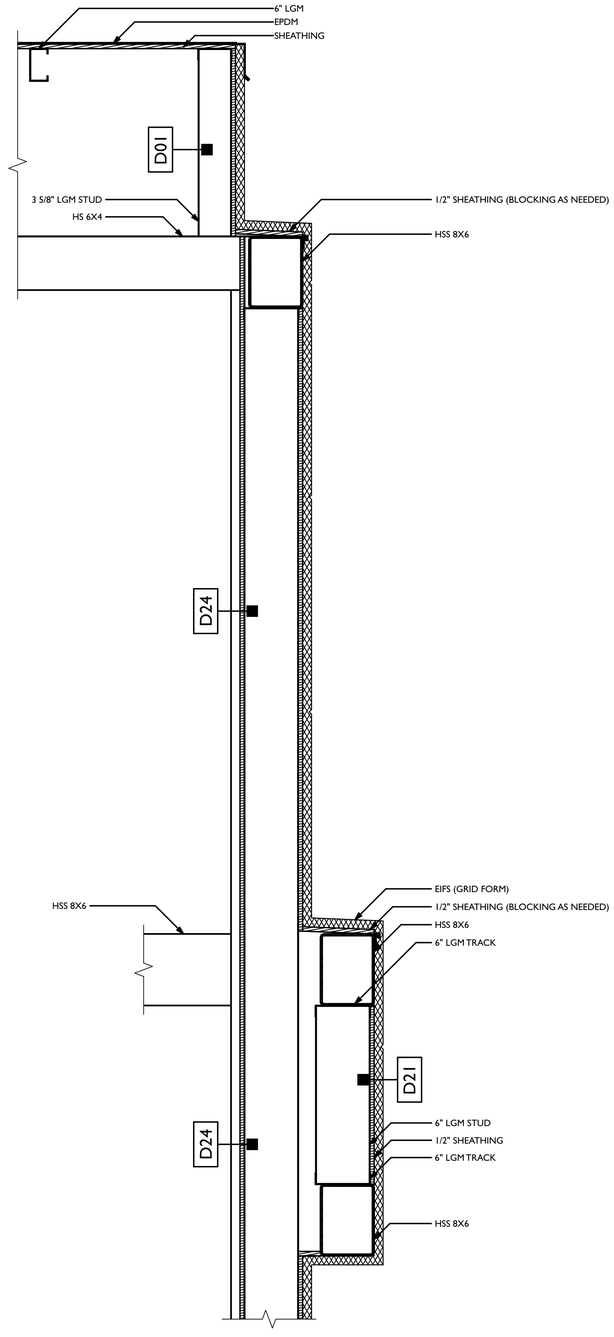
STATE OF MISSOURI
JAMES DAVID VERSANT III
A-2022038106
ARCHITECT
05.03.2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

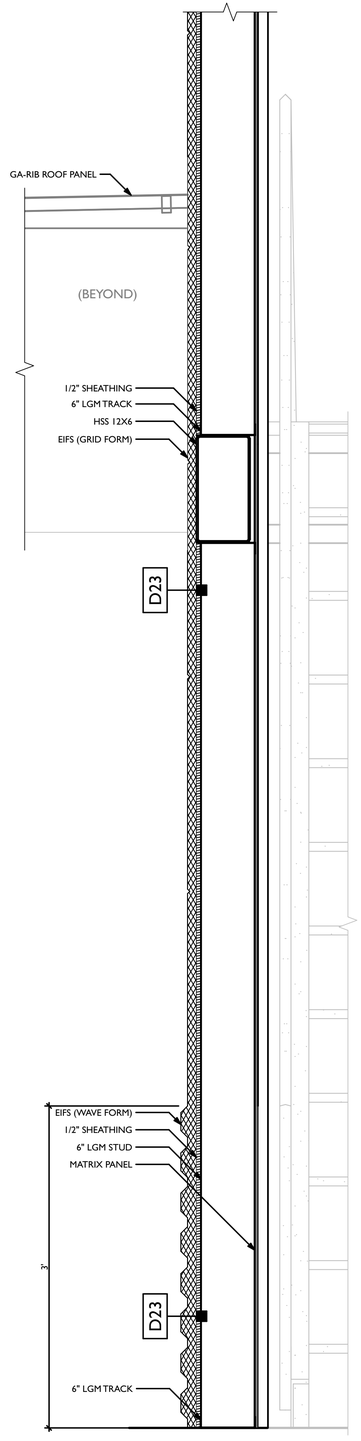
PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

SHEET:
MW-6.2
WALL/SLAB TYPES



A SECTION DETAIL - EQUIP. TOWER
SCALE: 1 1/2"= 1'-0"



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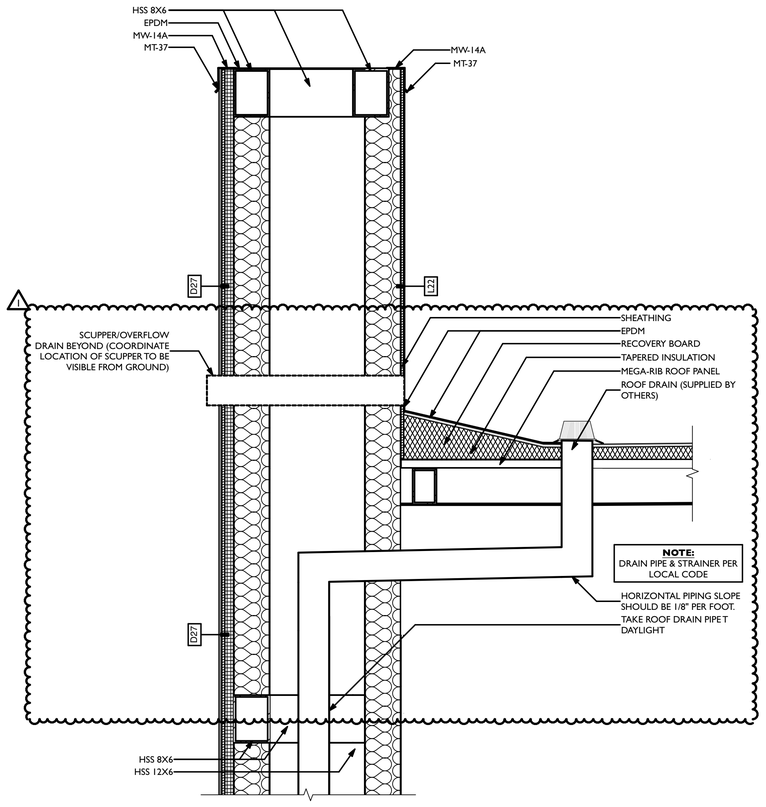
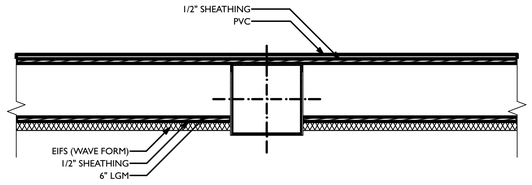


D SECTION DETAIL - CTRL. TOWER ROOF DRAIN
SCALE: 1" = 1'-0"



N PLAN DETAIL - WAVE AT COLUMN
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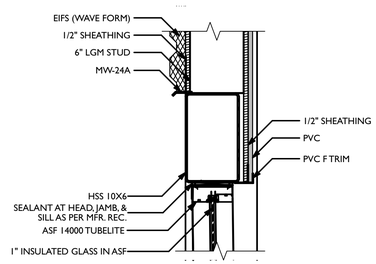

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SCALE: 1 1/2"= 1'-0"

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT
1	06/09/2023	DRAWING TRENCH UPDATE

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

22 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

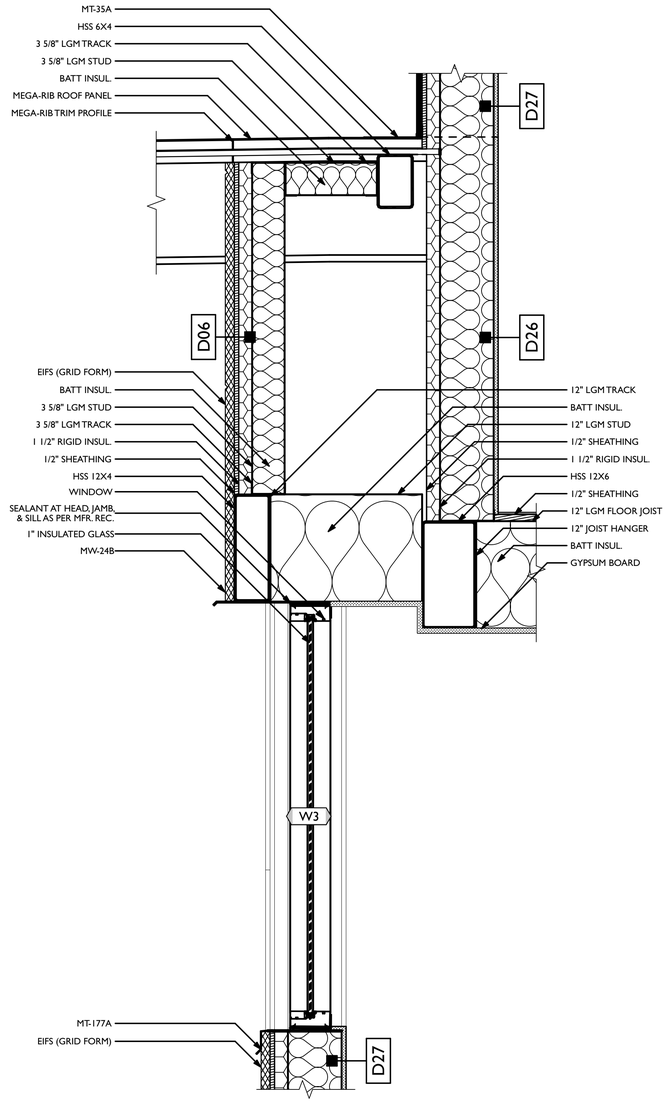
STATE OF MISSOURI
JAMES DAVID GRANT JR.
NUMBER A-5
ARCHITECT
05.03.2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

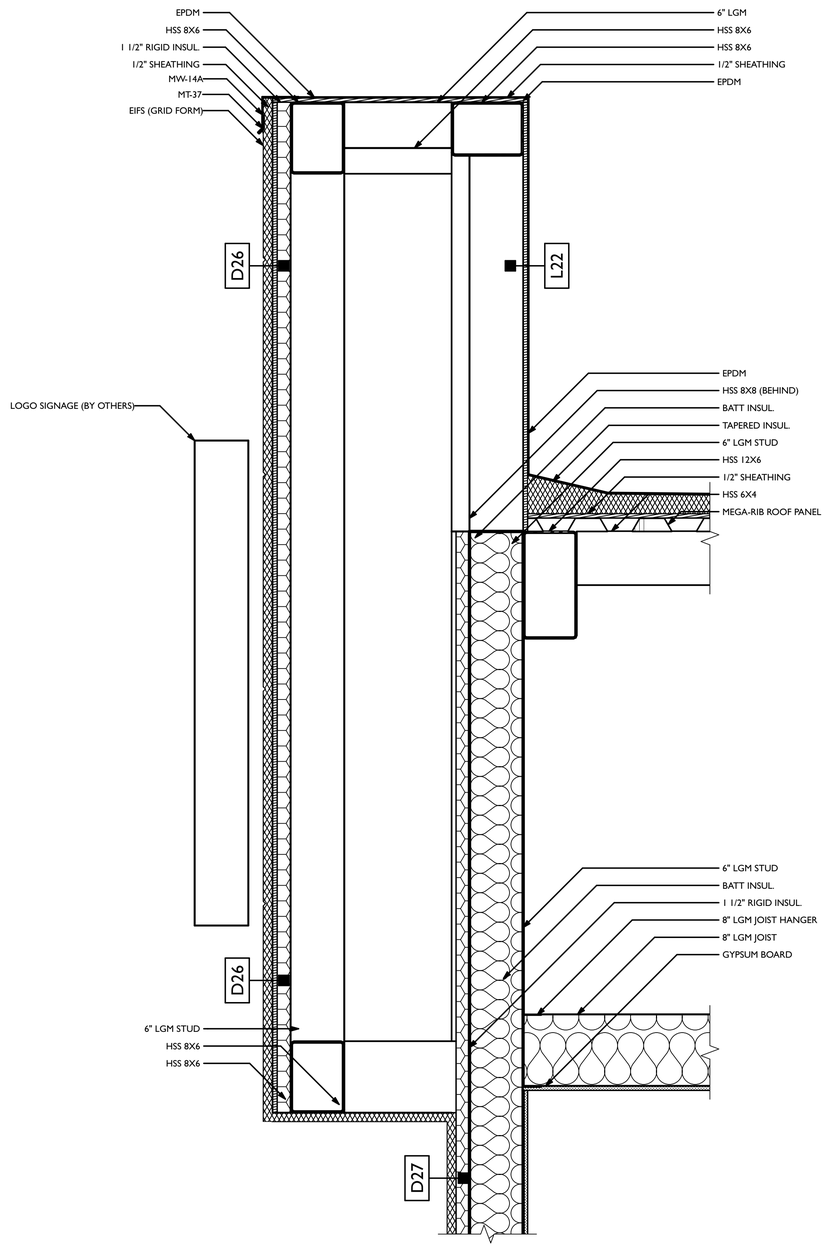
PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

SHEET:
MW-6.3
2D/3D DETAILS



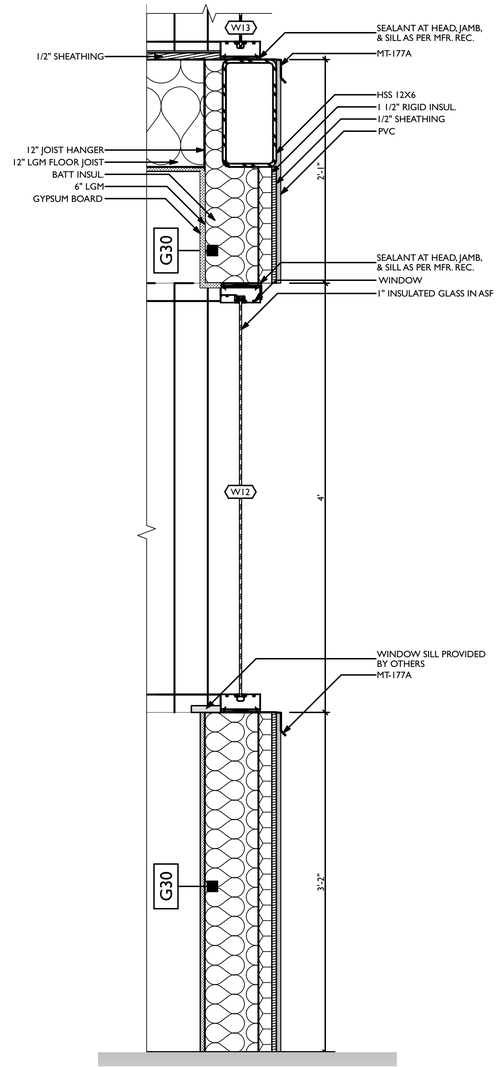
A SECTION DETAIL - CONTROL TOWER

SCALE: 1 1/2"= 1'-0"



B SECTION DETAIL - CONTROL TOWER

SCALE: 1 1/2"= 1'-0"



E SECTION DETAIL - CONTROL TOWER

SCALE: 1 1/2"= 1'-0"

DATE OF CREATION: 09/09/21 MW | JOB #: 2022-21

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

23 OF 39

NEW CAR WASH FOR:

TUNNEL VISION CAR WASH

20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

JAMES DAVID PLEASANT JR
2012018106
ARCHITECT
05.03.2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

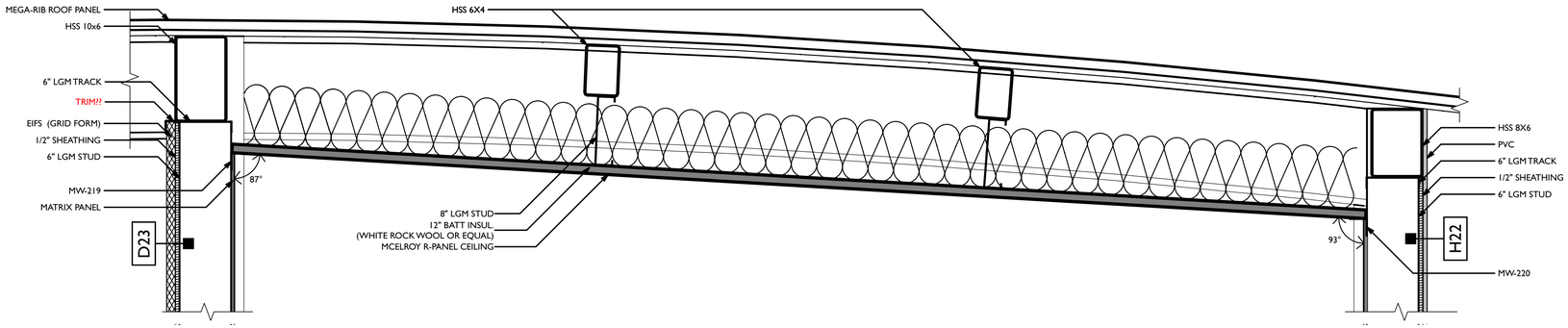
PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

SHEET:

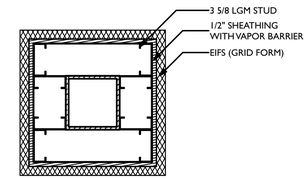
MW-6.4

2D/3D DETAILS



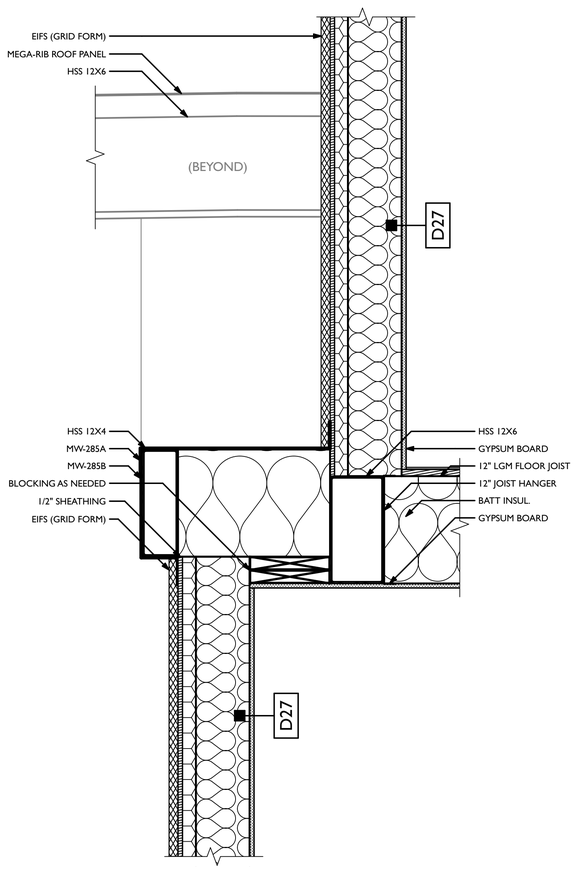
A SECTION DETAIL - EQMT. PLATFORM CEILING

SCALE: 1 1/2"= 1'-0"



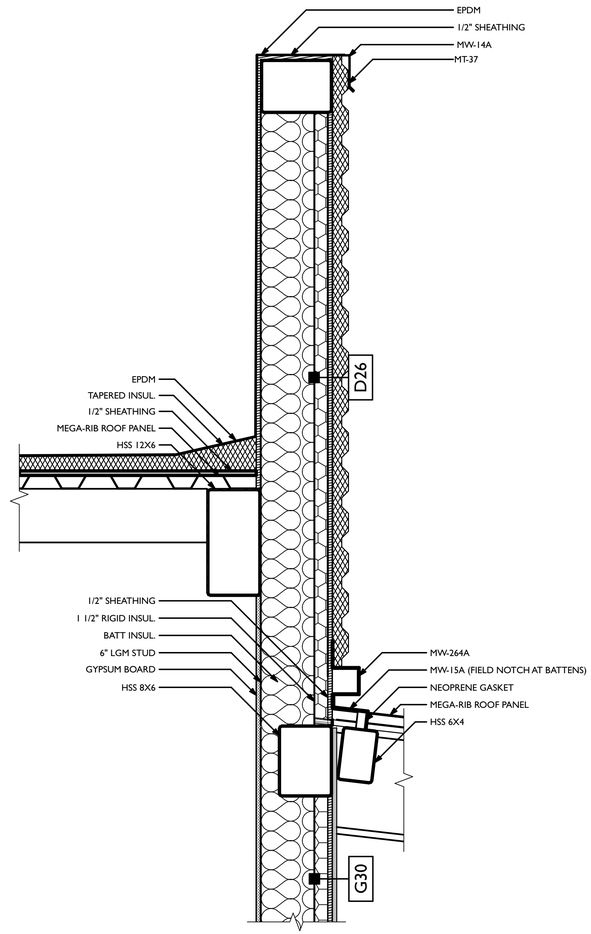
E PLAN DETAIL - COLUMN WRAP

SCALE: 1 1/2"= 1'-0"



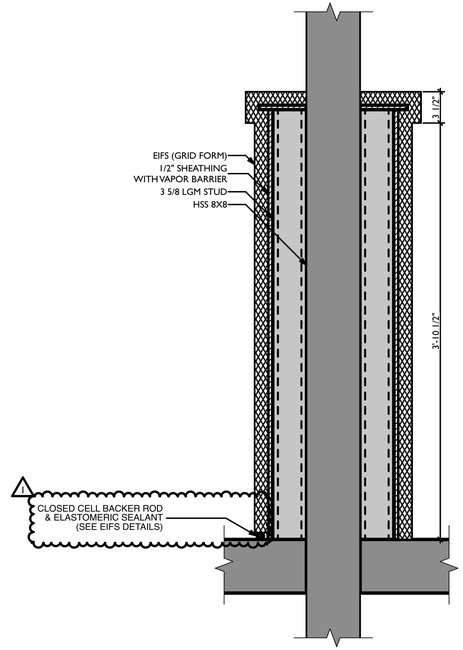
F SECTION DETAIL - CONTROL TOWER

SCALE: 1 1/2"= 1'-0"



H SECTION DETAIL - CONTROL TOWER

SCALE: 1 1/2"= 1'-0"



O SECTION DETAIL - COLUMN WRAP

SCALE: 1 1/2"= 1'-0"

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT
1	06/09/2023	DRAWING TRENCH UPDATE

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

24 OF 39

NEW CAR WASH FOR:

TUNNEL VISION CAR WASH

20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JAMES DAVID BRYANT JR
2015022227
ARCHITECT
05.03.2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

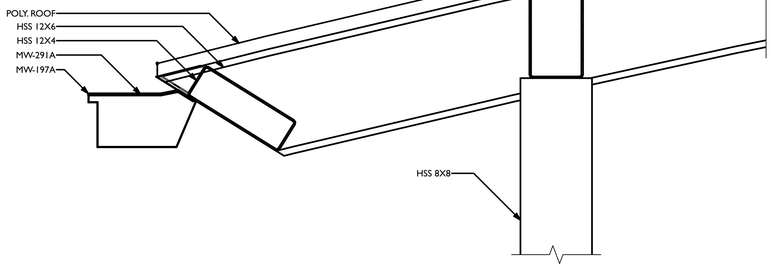
PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

SHEET:

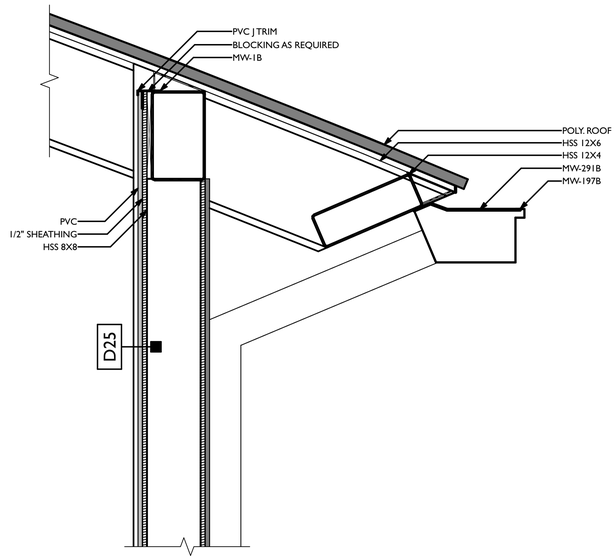
MW-6.5

2D/3D DETAILS

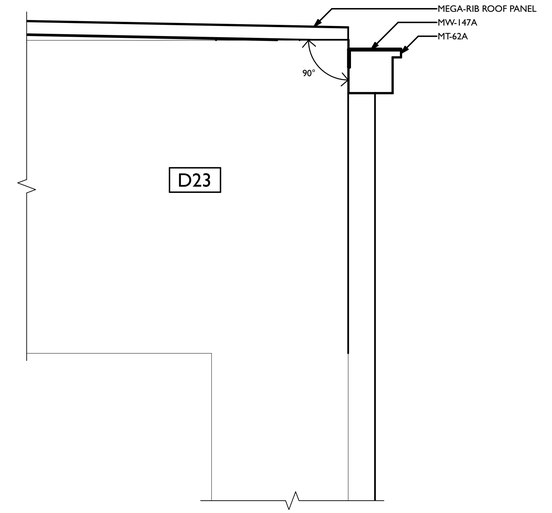
DATE OF CREATION: 09/09/21 MW JOB #: 2022-21



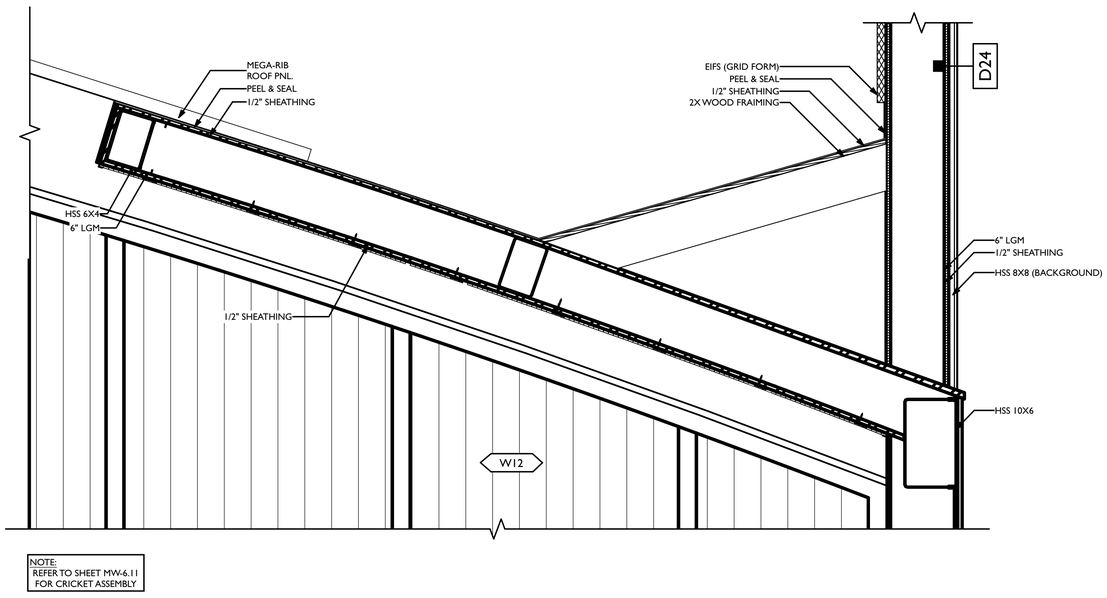
A SECTION DETAIL - PAY CANOPY EAVE
SCALE: 1 1/2"= 1'-0"



C SECTION DETAIL - WASH BAY EAVE
SCALE: 1 1/2"= 1'-0"

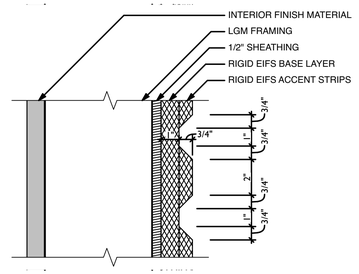


E SECTION DETAIL - DOG WASH CANOPY EAVE
SCALE: 1 1/2"= 1'-0"

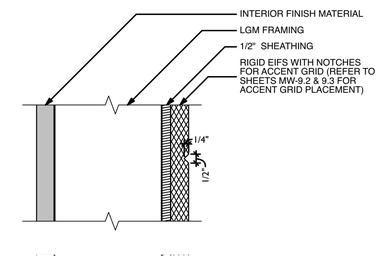


NOTE:
REFER TO SHEET MW-6.11
FOR CRICKET ASSEMBLY

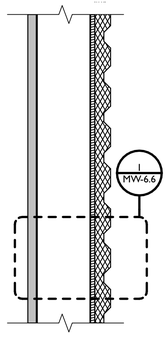
K CRICKET DETAIL
SCALE: 1 1/2"= 1'-0"



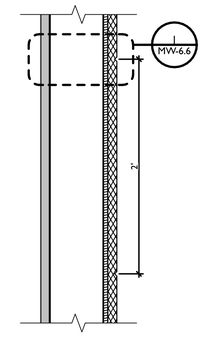
I EIFS GRID LINE ENLARGEMENT
SCALE: 3" = 1'-0"



J EIFS GRID LINE ENLARGEMENT
SCALE: 3" = 1'-0"



N SECTION DETAIL - EIFS (WAVE FORM)
SCALE: 1 1/2"= 1'-0"



O SECTION DETAIL - EIFS (GRID FORM)
SCALE: 1 1/2"= 1'-0"

REVISIONS		
ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

25 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

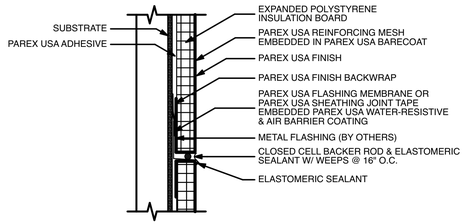
USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

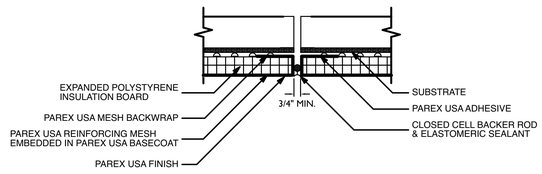
SHEET:
MW-6.6
2D/3D DETAILS

DATE OF CREATION: 09/09/21 MW (JOB #: 2022-21



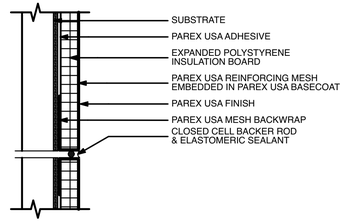
A EIFS - THROUGH SYSTEM FLASHING

SCALE: 1 1/2"= 1'-0"



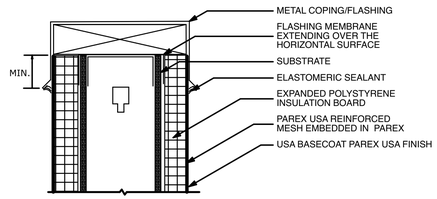
B EIFS - VERTICAL EXPANSION JOINT

SCALE: 1 1/2"= 1'-0"



C EIFS - HORIZONTAL EXPANSION JOINT

SCALE: 1 1/2"= 1'-0"



E EIFS - PARAPET WALL AT CAP FLASHING

SCALE: 1 1/2"= 1'-0"

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

MODERNWASH

5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

26 OF 39

NEW CAR WASH FOR:

TUNNEL VISION CAR WASH

20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JAMES DAVID FORGANT JR
2010020106
ARCHITECT

05.03.2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

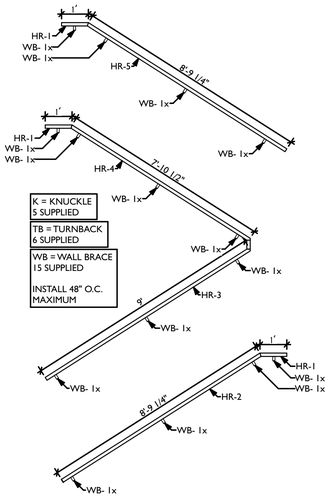
PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

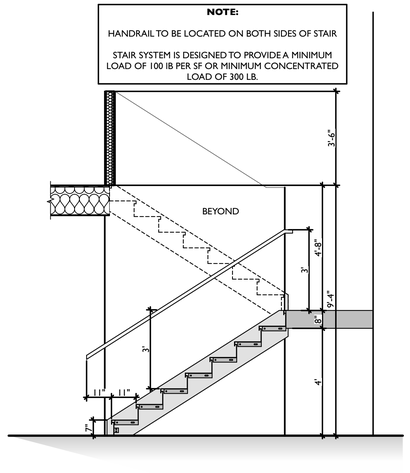
SHEET:

MW-6.7

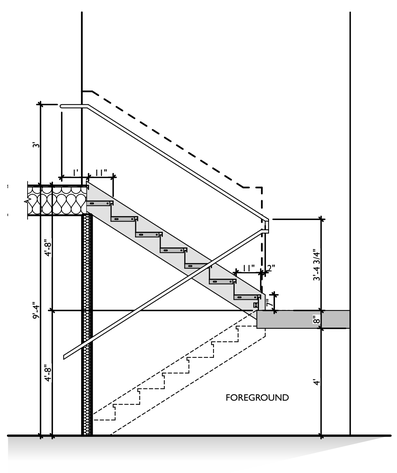
EIFS DETAILS



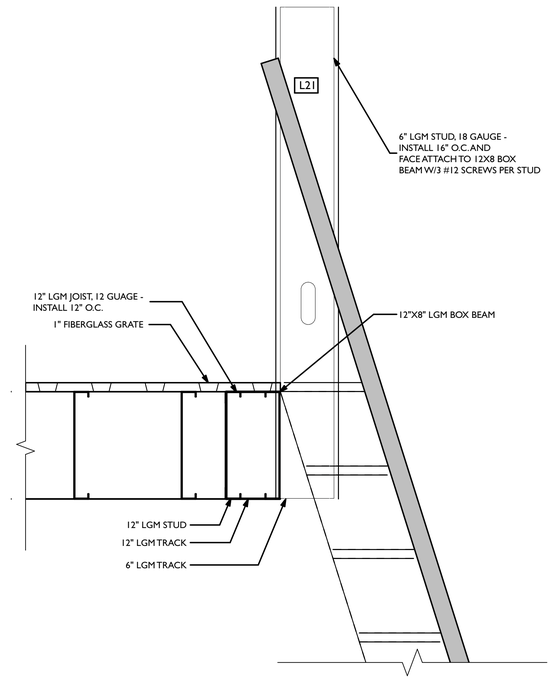
A HANDRAILS & MATERIALS
SCALE: 3/8" = 1'-0"



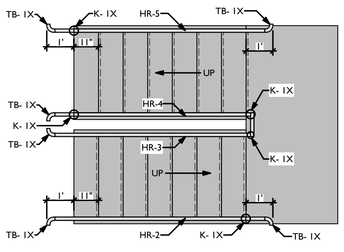
B SECTION - LOWER STAIRS
SCALE: 3/8" = 1'-0"



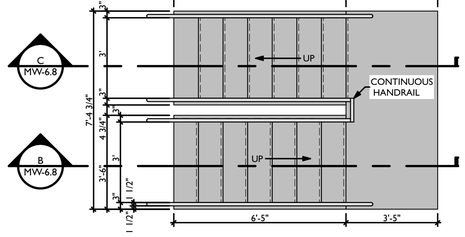
C SECTION - UPPER STAIRS
SCALE: 3/8" = 1'-0"



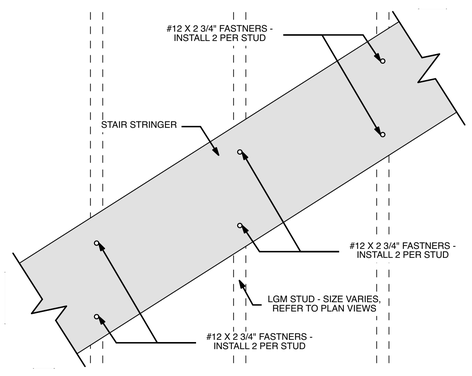
D SECTION DETAIL - HALF WALL AT SHIP'S LADDER
SCALE: 1 1/2"= 1'-0"



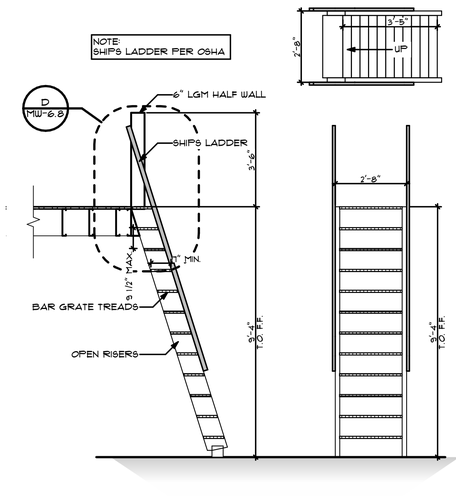
F STAIR MATERIAL PLAN
SCALE: 3/8" = 1'-0"



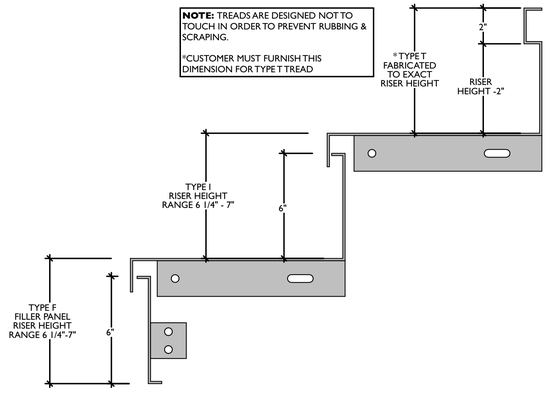
G STAIR PLAN
SCALE: 3/8" = 1'-0"



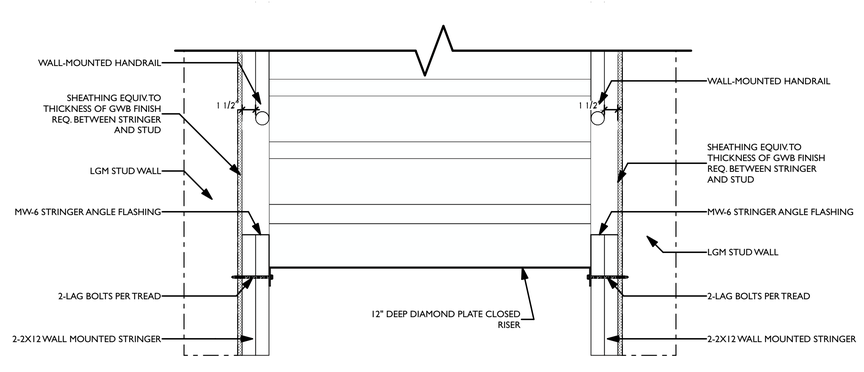
H STAIR STRINGER (TYP.)
SCALE: 1 1/2"= 1'-0"



O SECTION - SHIP'S LADDER
SCALE: 3/8" = 1'-0"



K SECTION DETAIL - STAIR TREAD
SCALE: 3" = 1'-0"



L SECTION DETAIL - STAIR TREAD
SCALE: 1 1/2"= 1'-0"

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

REVISIONS		
ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

27 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JAMES DAVID FORLANI JR
2010020104
ARCHITECT
05.03.2023

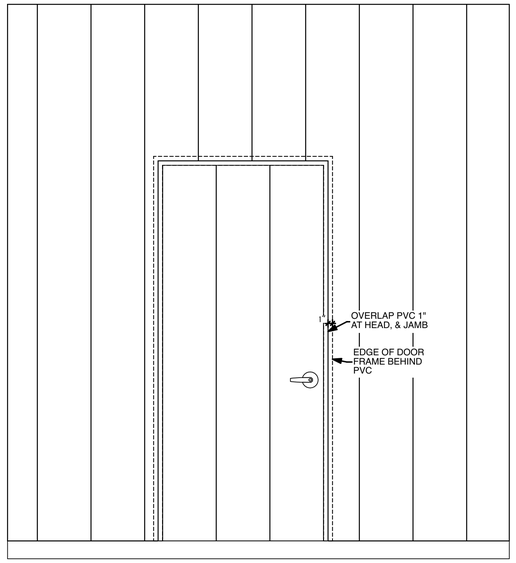
USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

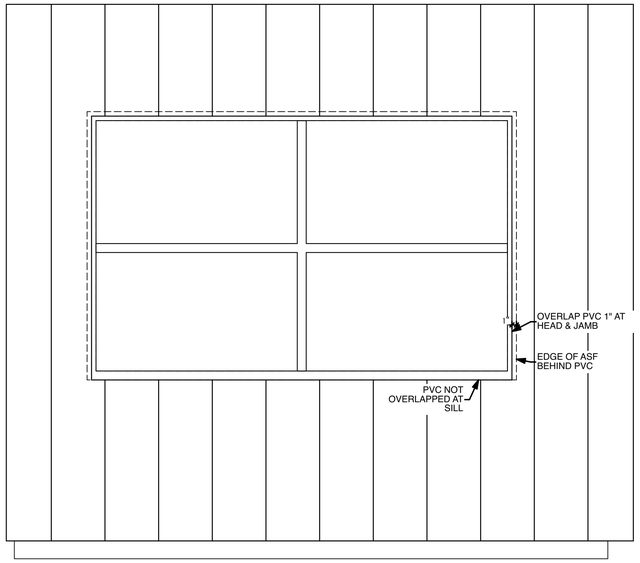
PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

SHEET:
MW-6.8
STAIR DETAILS

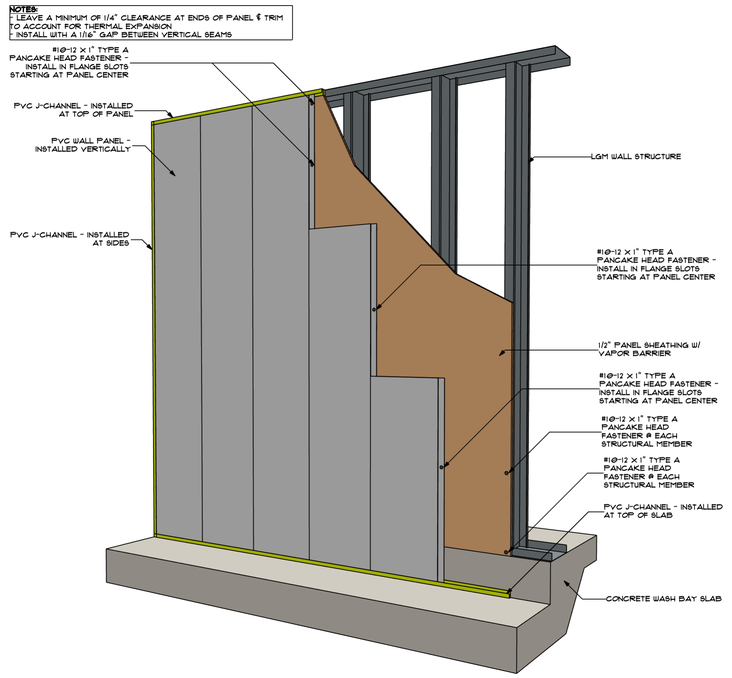
NOTE: DO NOT MECHANICALLY FASTEN THE PVC J-TRIM AT THE TOP OF WALL.



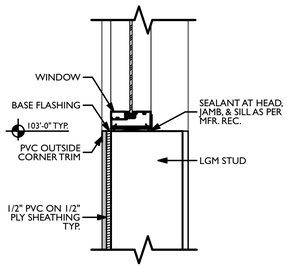
A PVC DETAIL
SCALE: 3/4" = 1'-0"



B PVC DETAIL
SCALE: 3/4" = 1'-0"



D PVC ASSEMBLY DETAIL
NOT TO SCALE



F PVC DETAIL
SCALE: 1 1/2"= 1'-0"

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

28 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

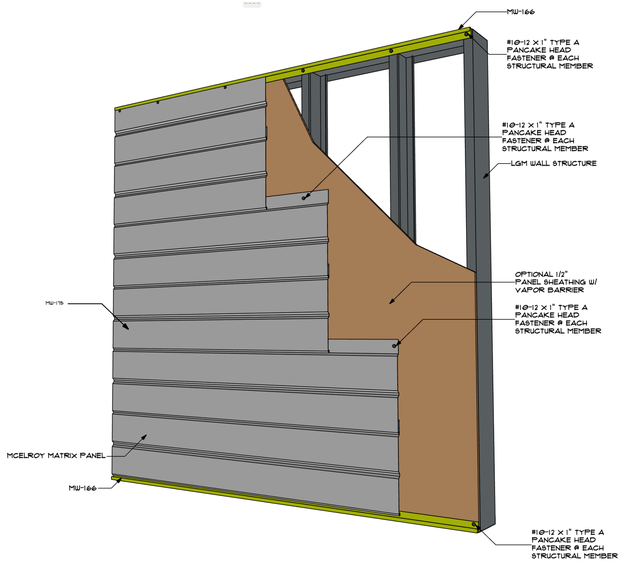
STATE OF MISSOURI
JAMES DAVID FORANT JR
2013036724
ARCHITECT
05.03.2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

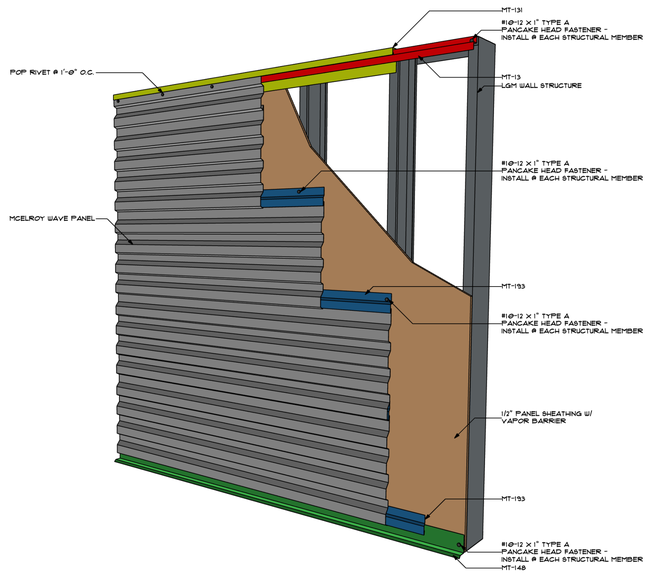
PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

SHEET:
MW-6.9
PVC DETAILS



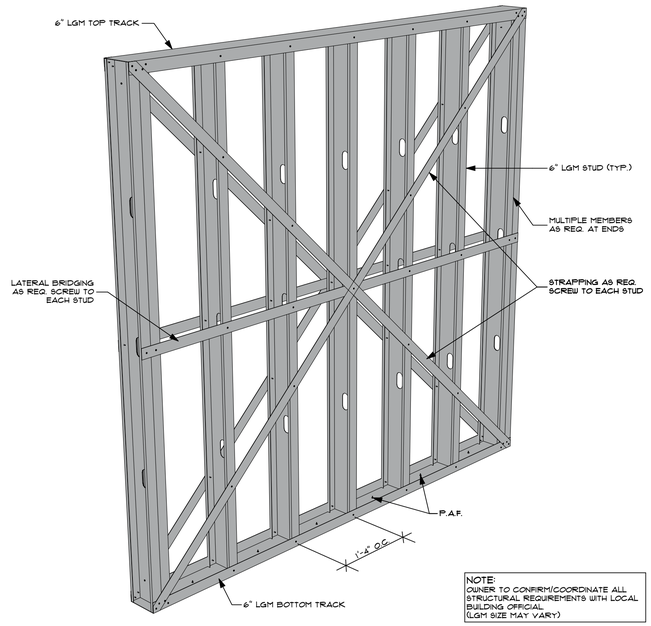
A MATRIX ASSEMBLY DETAIL

NOT TO SCALE



B WAVE ASSEMBLY DETAIL

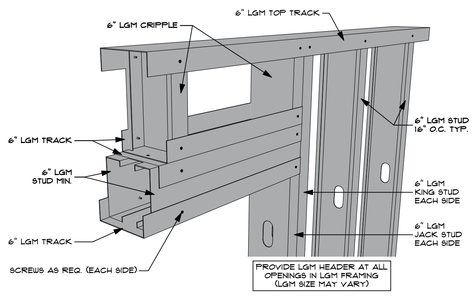
NOT TO SCALE



NOTE:
OWNER TO CONFIRM/COORDINATE ALL STRUCTURAL REQUIREMENTS WITH LOCAL BUILDING OFFICIAL.
(LGM SIZE MAY VARY)

D LGM FRAMING

SCALE: 1" = 1'-0"



F LGM HEADER

SCALE: 1" = 1'-0"

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

29 OF 39

NEW CAR WASH FOR:

TUNNEL VISION CAR WASH

20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JAMES DAVID FORGANT JR
2013020104
ARCHITECT
05.03.2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

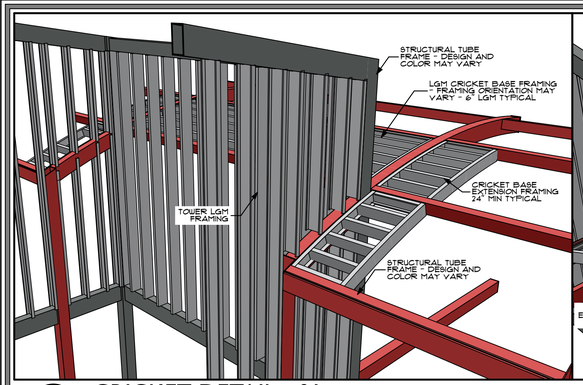
PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

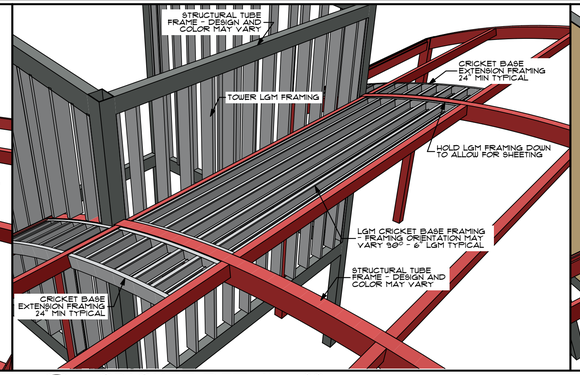
SHEET:

MW-6.10

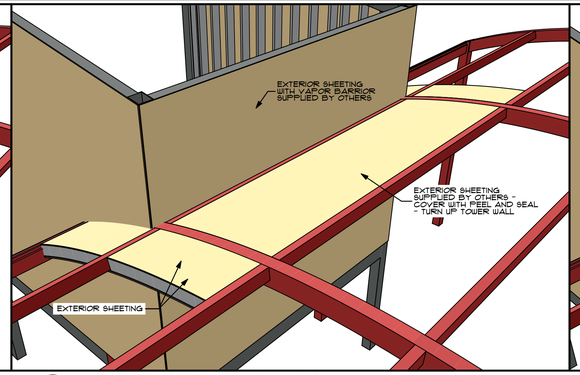
3D PVC & LGM DETAILS



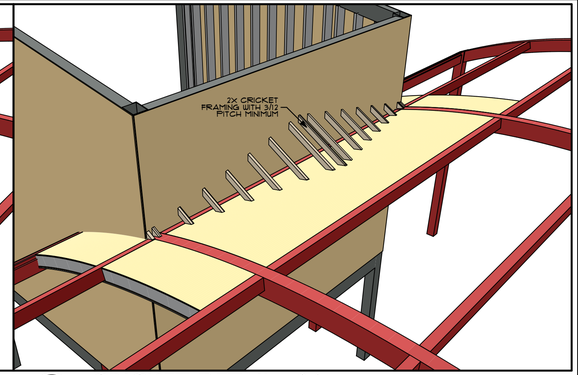
A CRICKET DETAIL - 01



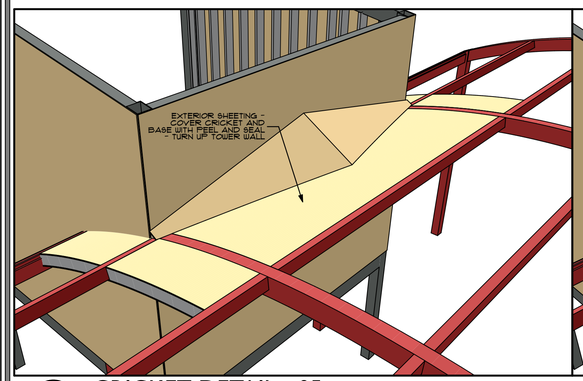
B CRICKET DETAIL - 02



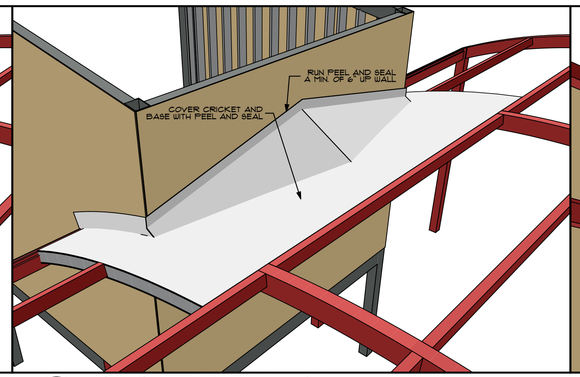
C CRICKET DETAIL - 03



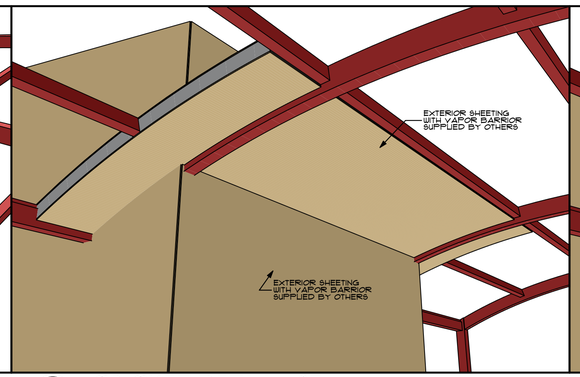
E CRICKET DETAIL - 04



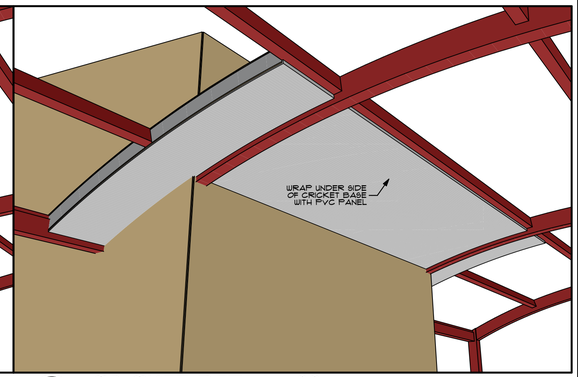
F CRICKET DETAIL - 05



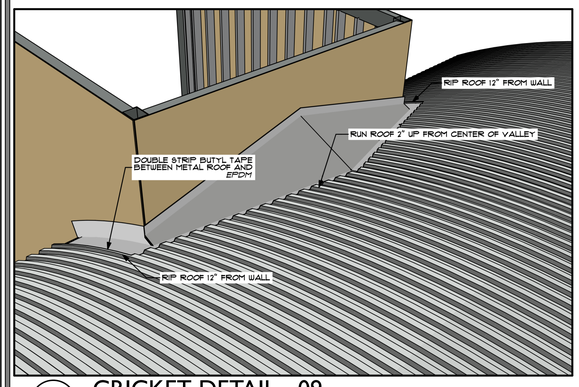
G CRICKET DETAIL - 06



H CRICKET DETAIL - 07



J CRICKET DETAIL - 08



K CRICKET DETAIL - 09

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

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2023-21_Moriarty_Lee's Summit.pln

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

30 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JAMES DAVID MORIARTY JR
2010020104
ARCHITECT
05-08-2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

SHEET:
MW-6.11
CRICKET DETAILS

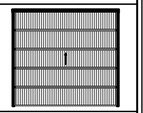
DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

LATCHSETS:	DOOR/WINDOW MATERIALS:	DOOR HARDWARE NOTE:	SAFETY GLAZING NOTE:
1. PASSAGE 2. ENTRY 3. STOR/JAN 4. OFFICE 5. PRIVACY 6. KEY & BOLT W/ THUMBTURN 7. PANIC DUMMY HANDLE	ALUM - ALUMINUM ASF - ALUMINUM STORE FRONT FBGS - FIBERGLASS FG - 1/4" FLOAT GLASS HM - HOLLOW METAL IFG - INSUL. 1" FLOAT GLASS PC - MULTI-WALL POLYCARBONATE PVC - POLYVINYL CHLORIDE SFG - SAFETY 1/4" FLOAT GLASS SIFG - SAFETY INSUL. 1" FLOAT GLASS SS - STAINLESS STEEL STL - STEEL WD - WOOD	DOORS SHALL BE READILY OPENABLE FROM THE SIDE FROM WHICH EGRESS IS TO BE MADE WITHOUT THE USE OF A KEY, OR SPECIAL KNOWLEDGE OR EFFORT. DOOR HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERATION DEVICES SHALL BE ACCESSIBLE AND NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING, OR TWISTING OF THE WRIST TO OPERATE. ALL EGRESS AND PEDESTRIAN DOORS SHALL COMPLY WITH ICC - ANSI 117.1 (CURRENT EDITION).	THE FOLLOWING CONDITIONS REQUIRE TEMPERED SAFETY GLAZING: 1. GLAZING IN DOORS 2. GLAZING WITH THE BOTTOM EDGE LESS THAN 18" ABOVE THR FLOOR. 3. GLAZING ADJACENT & WITHIN 24" OF A DOOR & LESS THAN 60" ABOVE STANDING SURFACE.

DOOR SCHEDULE

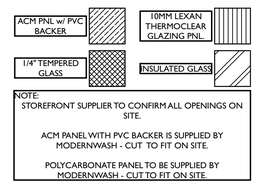
ID	#	DOOR						HW SET	FRAME			NOTES
		PANEL TYPE	W	HT	THK	MATL	GLZ		WDTH	THK	MATL	
A1	1	FULL GLASS	3'	7'	1 3/4"	ALUM	TEMP.	2	2"	4 1/2"	ALUM	SUPPLIED BY OTHERS
A2	1	FULL GLASS	3'	7'	1 3/4"	ALUM	TEMP.	2	2"	4 1/2"	ALUM	SUPPLIED BY OTHERS
A3	1	FULL GLASS	3'	7'	1 3/4"	ALUM	TEMP.	2	2"	4 1/2"	ALUM	SUPPLIED BY OTHERS
A4	1	FULL GLASS	3'	7'	1 3/4"	ALUM	TEMP.	2	2"	4 1/2"	ALUM	SUPPLIED BY OTHERS
A5	1	FULL GLASS	3'	7'	1 3/4"	ALUM	TEMP.	2	2"	4 1/2"	ALUM	SUPPLIED BY OTHERS
A6	1	FULL GLASS	3'	7'	1 3/4"	ALUM	TEMP.	2	2"	4 1/2"	ALUM	SUPPLIED BY OTHERS
B1	1	DOUBLE FLUSH	6'	7'	1 3/4"	SS	---	2	2"	4 1/2"	SS	PROVIDED BY MODERNWASH
B2	1	DOUBLE FLUSH	6'	7'	1 3/4"	HM	---	2	2"	4 1/2"	HM	SUPPLIED BY OTHERS
C1	1	FLUSH	3'	7'	1 3/4"	HM	---	2	2"	4 1/2"	HM	SUPPLIED BY OTHERS
C2	1	FLUSH	3'	7'	1 3/4"	SS	---	2	2"	4 1/2"	SS	PROVIDED BY MODERNWASH
C3	1	FLUSH	3'	7'	1 3/4"	SS	---	2	2"	4 1/2"	SS	PROVIDED BY MODERNWASH
D1	1	OVERHEAD	12'	11'-2"	1 3/4"	ALUM	POLY	---	3"	4"	STL	SUPPLIED BY OTHERS
D2	1	OVERHEAD	12'	11'-2"	1 3/4"	ALUM	POLY	---	3"	4"	STL	SUPPLIED BY OTHERS

DOOR

TYPE	DOUBLE FLUSH	DOUBLE FLUSH	FLUSH	FLUSH	FULL GLASS	OVERHEAD
VIEW						
DIMS	6'×7'	6'×7'	3'×7'	3'×7'	3'×7'	12'×11'-2"
MATERIAL	HM	SS	HM	SS	ALUM	ALUM
GLAZING	---	---	---	---	TEMP.	POLY

WINDOW SCHEDULE

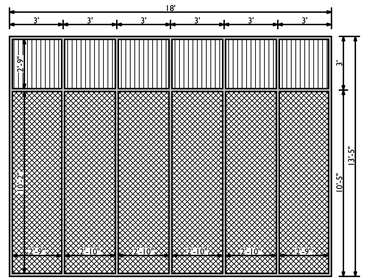
ID	#	LENGTH	HEIGHT	HOME STORY	NOTES
W01	6	216.00"	161.20"	1st FLOOR	---
W02	1	84.00"	48.00"	1st FLOOR	OPERABLE (CONFIRM STYLE WITH OWNER)
W03	1	60.00"	99.00"	1st FLOOR	---
W03	1	60.00"	99.00"	2nd FLOOR	---
W04	2	48.00"	48.00"	1st FLOOR	---
W05	1	65.55"	96.78"	1st FLOOR	RADIUSED EDGE
W06	1	65.55"	96.78"	1st FLOOR	RADIUSED EDGE
W07	1	65.00"	102.00"	1st FLOOR	---
W08	1	59.02"	102.00"	1st FLOOR	---
W09	1	NOTE: SEE WINDOW ELEVATIONS FOR JAMBS, HEAD, AND SILL FRAME DIMENSIONS.		1st FLOOR	CURVED BUTT GLAZED
W10	1	NOTE: SEE WINDOW ELEVATIONS FOR JAMBS, HEAD, AND SILL FRAME DIMENSIONS.		2nd FLOOR	CURVED BUTT GLAZED
W11	1	308.00"	237.50"	1st FLOOR	RADIUSED TOP
W12	2	308.00"	237.50"	1st FLOOR	RADIUSED TOP



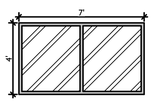
NOTE:
STOREFRONT SUPPLIER TO CONFIRM ALL OPENINGS ON SITE.

ACM PANEL WITH PVC BACKER IS SUPPLIED BY MODERNWASH - CUT TO FIT ON SITE.

POLYCARBONATE PANEL TO BE SUPPLIED BY MODERNWASH - CUT TO FIT ON SITE.



W01



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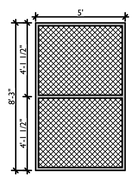

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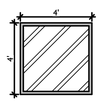

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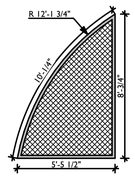
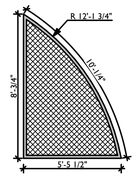


W05



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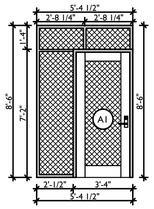

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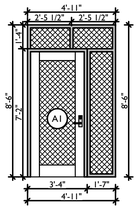

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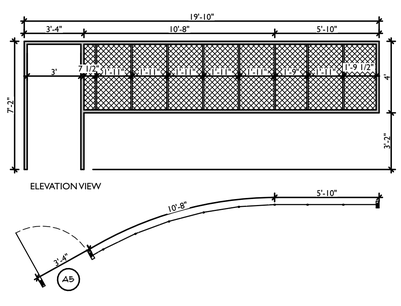
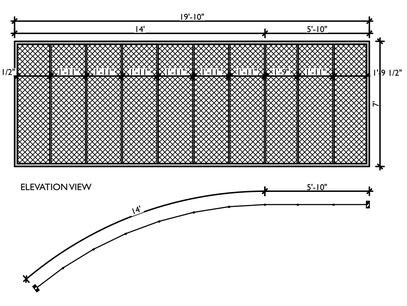


W09



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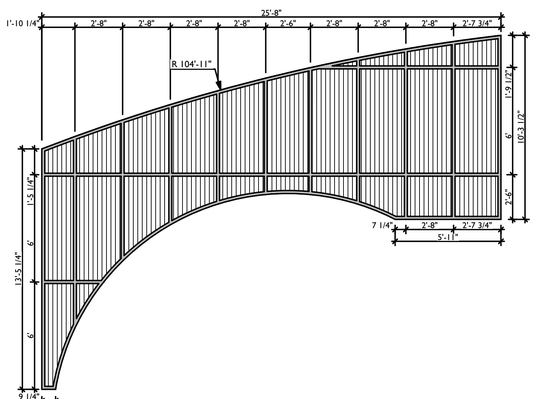
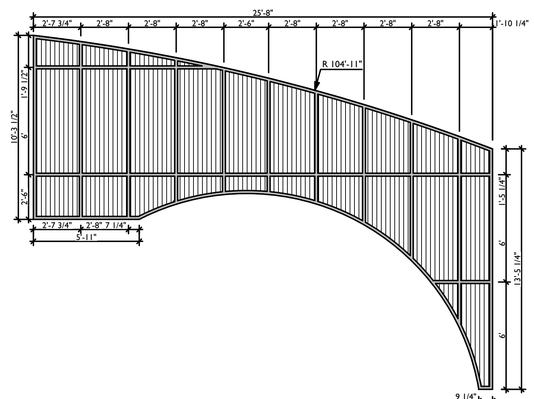


W11



W12

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

31 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JAMES DAVID BRYANT JR
2010038724
ARCHITECT
05-03-2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

SHEET:

MW-7.1

SCHEDULES

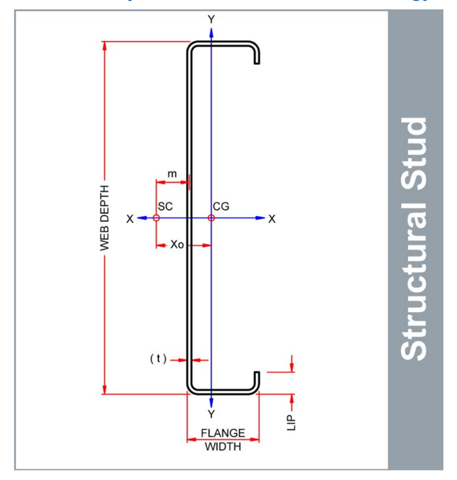
Product Submittal Sheet

ClarkDietrich BUILDING SYSTEMS

Tech Support: 888-437-3244 | Sales: 800-543-7140
Engineering Services: 877-832-3206 | clarkdietrich.com

Product category: S137 (1-3/8" Flange Structural Stud)
Product name: **362S137-43 (33ksi, CP60) P - Punched**
43mils (18ga) Coating: CP60 per ASTM C955
Color coding: Yellow

05.40.00 (Cold-Formed Metal Framing)



Geometric Properties

Web depth	3.625 in		
Flange width	1.375 in	Punchout width	1.50 in
Stiffening lip	0.375 in	Punchout length	4.00 in
Design thickness	0.0451 in	Min. steel thickness	0.0428 in
Yield strength, Fy	33 ksi	Fy with Cold-Work, Fya	33.0 ksi
Ultimate, Fu	45.0 ksi		

Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	0.306 in²
Member weight per foot of length	1.04 lb/ft
Moment of inertia (Ix)	0.616 in⁴
Section modulus (Sx)	0.340 in³
Radius of gyration (Rx)	1.419 in
Gross moment of inertia (Iy)	0.075 in⁴
Gross radius of gyration (Ry)	0.497 in

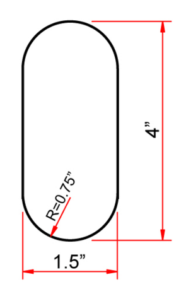
Effective Section Properties, Strong Axis

Effective Area (Ae)	0.214 in²
Moment of inertia for deflection (Ix)	0.616 in⁴
Section modulus (Sx)	0.320 in³
Allowable bending moment (Ma)	6.33 in-k
Allowable moment based on distortion buckling (Mad)	6.66 in-k
Allowable shear force in web (solid section)	1739 lb
Allowable shear force in web (perforated section)	676 lb
Unbraced length (Lu)	34.6 in

Torsional Properties

St. Venant torsion constant (J x 1000)	0.207 in⁴
Warping constant (Cw)	0.208 in⁶
Distance from shear center to neutral axis (Xo)	-0.991 in
Distance between shear center and web centerline (m)	0.608 in
Radii of gyration (Ro)	1.801 in
Torsional flexural constant (Beta)	0.697

Used in framing applications:
- Load-bearing walls
- Curtain walls
- Tall interior walls
- Floor & ceiling joists
- Trusses



Structural Punchout

East market punchout spacing: 12" from lead end then 24" o.c.

West market punchout spacing: 24" from lead end then 24" o.c.

ASTM & Code Standards:
- AISI North American Specification [NASPEC] S100-07 with 2010 supplement
- * Effective properties incorporate the strength increase from the cold work of forming
- Gross properties are based on the cross section away from the punchouts
- Structural framing is produced to meet or exceed ASTM C955
- Sheet steel meets or exceeds mechanical and chemical requirements of ASTM A1003
- ClarkDietrich's structural and nonstructural framing comply with the SFIA Code Compliance Certification Program, ICC-ES ESR-1166P and ATI CCRR-0206
- For installation & storage information refer to ASTM C1007
- SDS & Product Certification Information is available at www.clarkdietrich.com

Sustainability Credits:
For more details and LEED letters contact Technical Services at 888-437-3244 or visit www.clarkdietrich.com/LEED
LEED v4 MR Credit -- Building Product Disclosure and Optimization: EPD (up to 2 points) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).
LEED 2009 Credit MR 2 & MR 4 -- ClarkDietrich's steel products are 100% recyclable and have a minimum recycled content of 34.2% (19.8% post-consumer and 14.4% pre-consumer). If seeking a higher number to meet Credit MR 5, please contact us at (info@clarkdietrich.com / 888-437-3244)

Project Information	Contractor Information	Architect Information
Name:	Name:	Name:
Address:	Contact:	Contact:
	Phone:	Phone:
	Fax:	Fax:

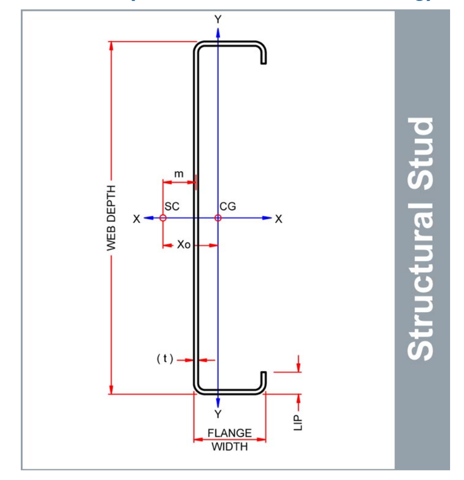
Product Submittal Sheet

ClarkDietrich BUILDING SYSTEMS

Tech Support: 888-437-3244 | Sales: 800-543-7140
Engineering Services: 877-832-3206 | clarkdietrich.com

Product category: S137 (1-3/8" Flange Structural Stud)
Product name: **600S137-43 (33ksi, CP60) P - Punched**
43mils (18ga) Coating: CP60 per ASTM C955
Color coding: Yellow

05.40.00 (Cold-Formed Metal Framing)



Geometric Properties

Web depth	6.000 in		
Flange width	1.375 in	Punchout width	1.50 in
Stiffening lip	0.375 in	Punchout length	4.00 in
Design thickness	0.0451 in	Min. steel thickness	0.0428 in
Yield strength, Fy	33 ksi	Fy with Cold-Work, Fya	33.0 ksi
Ultimate, Fu	45.0 ksi		

Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	0.413 in²
Member weight per foot of length	1.41 lb/ft
Moment of inertia (Ix)	2.042 in⁴
Section modulus (Sx)	0.681 in³
Radius of gyration (Rx)	2.224 in
Gross moment of inertia (Iy)	0.087 in⁴
Gross radius of gyration (Ry)	0.459 in

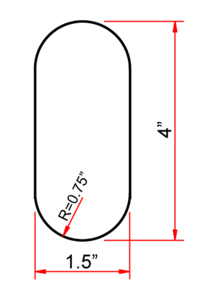
Effective Section Properties, Strong Axis

Effective Area (Ae)	0.222 in²
Moment of inertia for deflection (Ix)	2.041 in⁴
Section modulus (Sx)	0.645 in³
Allowable bending moment (Ma)	12.74 in-k
Allowable moment based on distortion buckling (Mad)	11.83 in-k
Allowable shear force in web (solid section)	1416 lb
Allowable shear force in web (perforated section)	1240 lb
Unbraced length (Lu)	33.3 in

Torsional Properties

St. Venant torsion constant (J x 1000)	0.280 in⁴
Warping constant (Cw)	0.633 in⁶
Distance from shear center to neutral axis (Xo)	-0.796 in
Distance between shear center and web centerline (m)	0.513 in
Radii of gyration (Ro)	2.406 in
Torsional flexural constant (Beta)	0.890

Used in framing applications:
- Load-bearing walls
- Curtain walls
- Tall interior walls
- Floor & ceiling joists
- Trusses



Structural Punchout

East market punchout spacing: 12" from lead end then 24" o.c.

West market punchout spacing: 24" from lead end then 24" o.c.

ASTM & Code Standards:
- AISI North American Specification [NASPEC] S100-07 with 2010 supplement
- * Effective properties incorporate the strength increase from the cold work of forming
- Gross properties are based on the cross section away from the punchouts
- Structural framing is produced to meet or exceed ASTM C955
- Sheet steel meets or exceeds mechanical and chemical requirements of ASTM A1003
- ClarkDietrich's structural and nonstructural framing comply with the SFIA Code Compliance Certification Program, ICC-ES ESR-1166P and ATI CCRR-0206
- For installation & storage information refer to ASTM C1007
- SDS & Product Certification Information is available at www.clarkdietrich.com

Sustainability Credits:
For more details and LEED letters contact Technical Services at 888-437-3244 or visit www.clarkdietrich.com/LEED
LEED v4 MR Credit -- Building Product Disclosure and Optimization: EPD (up to 2 points) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).
LEED 2009 Credit MR 2 & MR 4 -- ClarkDietrich's steel products are 100% recyclable and have a minimum recycled content of 34.2% (19.8% post-consumer and 14.4% pre-consumer). If seeking a higher number to meet Credit MR 5, please contact us at (info@clarkdietrich.com / 888-437-3244)

Project Information	Contractor Information	Architect Information
Name:	Name:	Name:
Address:	Contact:	Contact:
	Phone:	Phone:
	Fax:	Fax:

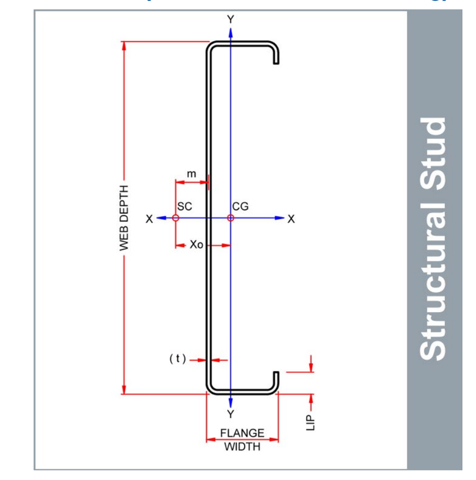
Product Submittal Sheet

ClarkDietrich BUILDING SYSTEMS

Tech Support: 888-437-3244 | Sales: 800-543-7140
Engineering Services: 877-832-3206 | clarkdietrich.com

Product category: S137 (1-3/8" Flange Structural Stud)
Product name: **800S137-43 (33ksi, CP60) P - Punched**
43mils (18ga) Coating: CP60 per ASTM C955
Color coding: Yellow

05.40.00 (Cold-Formed Metal Framing)



Geometric Properties

Web depth	8.000 in		
Flange width	1.375 in	Punchout width	1.50 in
Stiffening lip	0.375 in	Punchout length	4.00 in
Design thickness	0.0451 in	Min. steel thickness	0.0428 in
Yield strength, Fy	33 ksi	Fy with Cold-Work, Fya	33.0 ksi
Ultimate, Fu	45.0 ksi		

Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	0.503 in²
Member weight per foot of length	1.71 lb/ft
Moment of inertia (Ix)	4.135 in⁴
Section modulus (Sx)	1.034 in³
Radius of gyration (Rx)	2.866 in
Gross moment of inertia (Iy)	0.093 in⁴
Gross radius of gyration (Ry)	0.430 in

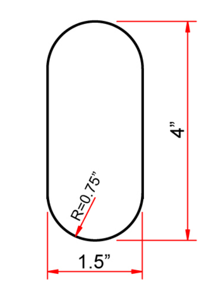
Effective Section Properties, Strong Axis

Effective Area (Ae)	0.224 in²
Moment of inertia for deflection (Ix)	4.001 in⁴
Section modulus (Sx)	0.896 in³
Allowable bending moment (Ma)	17.70 in-k
Allowable moment based on distortion buckling (Mad)	15.78 in-k
Allowable shear force in web (solid section)	1051 lb
Allowable shear force in web (perforated section)	1051 lb
Unbraced length (Lu)	32.2 in

Torsional Properties

St. Venant torsion constant (J x 1000)	0.341 in⁴
Warping constant (Cw)	1.214 in⁶
Distance from shear center to neutral axis (Xo)	-0.687 in
Distance between shear center and web centerline (m)	0.454 in
Radii of gyration (Ro)	2.979 in
Torsional flexural constant (Beta)	0.947

Used in framing applications:
- Load-bearing walls
- Curtain walls
- Tall interior walls
- Floor & ceiling joists
- Trusses



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- Structural framing is produced to meet or exceed ASTM C955
- Sheet steel meets or exceeds mechanical and chemical requirements of ASTM A1003
- ClarkDietrich's structural and nonstructural framing comply with the SFIA Code Compliance Certification Program, ICC-ES ESR-1166P and ATI CCRR-0206
- For installation & storage information refer to ASTM C1007
- SDS & Product Certification Information is available at www.clarkdietrich.com

Sustainability Credits:
For more details and LEED letters contact Technical Services at 888-437-3244 or visit www.clarkdietrich.com/LEED
LEED v4 MR Credit -- Building Product Disclosure and Optimization: EPD (up to 2 points) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).
LEED 2009 Credit MR 2 & MR 4 -- ClarkDietrich's steel products are 100% recyclable and have a minimum recycled content of 34.2% (19.8% post-consumer and 14.4% pre-consumer). If seeking a higher number to meet Credit MR 5, please contact us at (info@clarkdietrich.com / 888-437-3244)

Project Information	Contractor Information	Architect Information
Name:	Name:	Name:
Address:	Contact:	Contact:
	Phone:	Phone:
	Fax:	Fax:

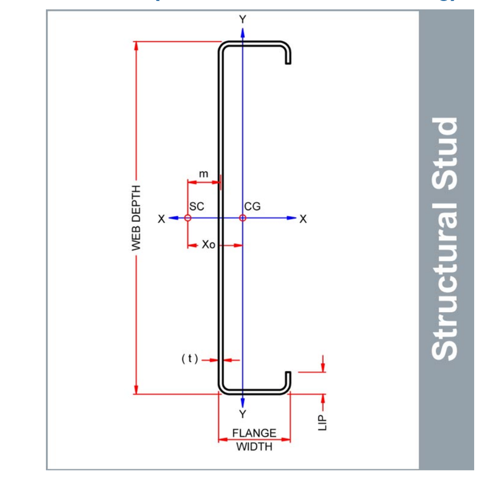
Product Submittal Sheet

ClarkDietrich BUILDING SYSTEMS

Tech Support: 888-437-3244 | Sales: 800-543-7140
Engineering Services: 877-832-3206 | clarkdietrich.com

Product category: S162 (1-5/8" Flange Structural Stud)
Product name: **1200S162-97 (50ksi, CP60) P - Punched**
97mils (12ga) Coating: CP60 per ASTM C955
Color coding: Red

05.40.00 (Cold-Formed Metal Framing)



Geometric Properties

Web depth	12.000 in		
Flange width	1.625 in	Punchout width	1.50 in
Stiffening lip	0.500 in	Punchout length	4.00 in
Design thickness	0.1017 in	Min. steel thickness	0.0966 in
Yield strength, Fy	50 ksi	Fy with Cold-Work, Fya	50.0 ksi
Ultimate, Fu	65.0 ksi		

Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	1.576 in²
Member weight per foot of length	5.36 lb/ft
Moment of inertia (Ix)	26.977 in⁴
Section modulus (Sx)	4.496 in³
Radius of gyration (Rx)	4.138 in
Gross moment of inertia (Iy)	0.332 in⁴
Gross radius of gyration (Ry)	0.459 in

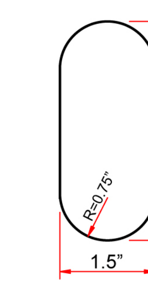
Effective Section Properties, Strong Axis

Effective Area (Ae)	0.699 in²
Moment of inertia for deflection (Ix)	26.738 in⁴
Section modulus (Sx)	4.091 in³
Allowable bending moment (Ma)	122.50 in-k
Allowable moment based on distortion buckling (Mad)	111.38 in-k
Allowable shear force in web (solid section)	8147 lb
Allowable shear force in web (perforated section)	7411 lb
Unbraced length (Lu)	29.5 in

Torsional Properties

St. Venant torsion constant (J x 1000)	5.433 in⁴
Warping constant (Cw)	10.331 in⁶
Distance from shear center to neutral axis (Xo)	-0.691 in
Distance between shear center and web centerline (m)	0.470 in
Radii of gyration (Ro)	4.220 in
Torsional flexural constant (Beta)	0.973

Used in framing applications:
- Load-bearing walls
- Curtain walls
- Tall interior walls
- Floor & ceiling joists
- Trusses



Structural Punchout

East market punchout spacing: 12" from lead end then 24" o.c.

West market punchout spacing: 24" from lead end then 24" o.c.

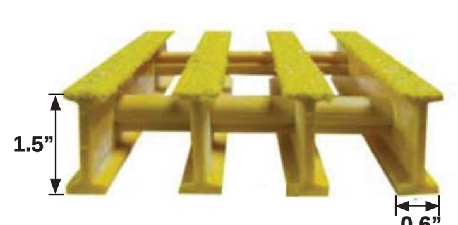
ASTM & Code Standards:
- AISI North American Specification [NASPEC] S100-12
- * Effective properties incorporate the strength increase from the cold work of forming
- Gross properties are based on the cross section away from the punchouts
- Structural framing is produced to meet or exceed ASTM C955
- Sheet steel meets or exceeds mechanical and chemical requirements of ASTM A1003
- ClarkDietrich's structural and nonstructural framing comply with the SFIA Code Compliance Certification Program, ICC-ES ESR-1166P and ATI CCRR-0206
- For installation & storage information refer to ASTM C1007
- SDS & Product Certification Information is available at itools.clarkdietrich.com

Sustainability Credits:
For more details and LEED letters contact Technical Services at 888-437-3244 or visit www.clarkdietrich.com/LEED
LEED v4 MR Credit -- Building Product Disclosure and Optimization: EPD (1 point) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).
LEED 2009 Credit MR 2 & MR 4 -- ClarkDietrich's steel products are 100% recyclable and have a minimum recycled content of 34.2% (19.8% post-consumer and 14.4% pre-consumer). If seeking a higher number to meet Credit MR 5, please contact us at (info@clarkdietrich.com / 888-437-3244)

Project Information	Contractor Information	Architect Information
Name:	Name:	Name:
Address:	Contact:	Contact:
	Phone:	Phone:
	Fax:	Fax:

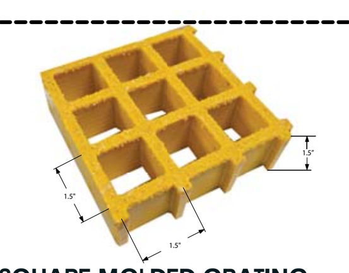
SQUARE MOLDED & PULTRUTED FIBERGLASS GRATING LOAD TABLE ISOPHTHALIC POLYESTER RESIN

MISC ITEMS



PULTRUDED GRATING
3FT X 10FT SHEET WEIGHS - 125LBS
50% OPEN AREA

CHART BELOW SHOWS THE DEFLECTION IN INCHES AT THE CENTER POINT

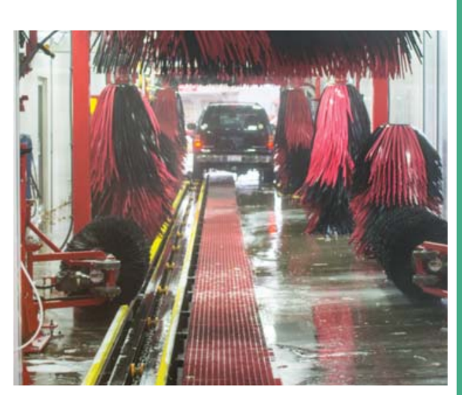


SQUARE MOLDED GRATING
3FT X 10FT SHEET WEIGHS - 123LBS
68% OPEN AREA

MOVING OBJECTS EXERT HEAVIER WEIGHT THAN THEIR ACTUAL STANDING WEIGHT

SPAN	FIBERGLASS TYPE	200 LBS	300 LBS	500 LBS	1000 LBS	MAX LOAD
18"	SQUARE MOLDED	0.03	0.05	0.08	0.15	1,733 LBS
	PULTRUDED	0.006	0.009	0.015	0.030	2,250 LBS
24"	SQUARE MOLDED	0.07	0.10	0.17	0.350	1,300 LBS
	PULTRUDED	0.018	0.027	0.046	0.095	1,700 LBS
30"	SQUARE MOLDED	0.12	0.18	0.300	-----	1,033 LBS
	PULTRUDED	0.043	0.065	0.108	0.220	1,340 LBS
36"	SQUARE MOLDED	0.21	0.32	0.55	-----	867 LBS
	PULTRUDED	0.087	0.131	0.218	0.440	1,130 LBS

FLAT TOP LOAD TABLE SIMILAR TO SQUARE MOLDED



www.tsscws.com | ph:586-427-0070 | youtube.com/tsscws | facebook.com/tsscws

mfm

Technical Information

PEEL & SEAL®

MFM Building Products Corp. manufactures a wide range of innovative waterproofing products for the building industry. With more than 50 years of field experience, MFM products are engineered for superior performance and ease of installation.

DESCRIPTION
Peel & Seal® is a patented laminate of reflective aluminum foil, rugged, cross-linked polymer films, and a thick layer of rubberized asphalt. The asphalt compound adheres to most surfaces and seals around most punctures, forming a protective waterproof barrier. A high-quality release liner is applied to protect the adhesive surface until installation.

USES
Peel & Seal® may be used anywhere a fast, dependable waterproofing barrier is needed and is ideal for roofing, patching, gutter repair, flashing, and general waterproofing where the membrane will be exposed. Designed for low-slope roof applications, it is ideal for mobile homes, trailers, RVs, and sun rooms. No glues, torches, tapes or fasteners are required – only a utility knife and a large push or hand roller are needed for installation.

FEATURES
- For roofing, waterproofing, patching and repair
- Adheres directly to roof deck or substrate
- Aluminum surface reflects heat lowering utility costs
- Easy to install, low cost and labor saving
- Lightweight and easy to handle
- Tough and durable – puncture and abrasion resistant
- Stretches to allow for building movement and conforms to odd shapes
- Requires no coating or covering for exposure to sunlight

INSTALLATION
This is a summary of how the product is installed. FOLLOW APPLICATION INSTRUCTIONS ON THE CARTON.

General Installation: The surface to receive Peel & Seal® must be clean, smooth, dry and free from oil, grease, solvents or debris – these interfere with proper adhesion. Apply in fair weather at temperatures above 55°F. Minimum slope of 1/2" per foot is required. Not intended for areas with ponding water.

Peel & Seal® is easily installed by removing the release liner and pressing into place. Cut to fit with a utility knife. Peel & Seal® is pressure sensitive. Apply maximum pressure uniformly over entire membrane using a large push or hand roller. Peel & Seal® adheres to the deck and to itself when overlapped. Seams and overlaps must be firmly rolled with a hand roller.

When overlapping, 3" side laps and 6" end laps are required. Masonry, concrete, OSB, weathered wood, and rusted metal should be primed first with an asphalt-based primer. To improve adhesion, use MFM Spray Adhesive™ as needed. **When installing over EPDM, the surface must be primed with *WeatherBond™ Multi-Purpose primer.**

When installing over silicone caulks, sealants or petroleum-based materials, allow any solvents to fully cure. Masonry should also be fully cured. Installer is responsible for compatibility with caulks and sealants.

PRODUCT DATA

Installation Temperature Range	>55°F
Material Color	Aluminum, White, Almond, Gray
Roll Widths	3", 4", 6", 9", 12", 18", 36"
Roll Length	33.5'
Carton Weight	33 lbs
Rolls per Carton	12, 9, 6, 4, 3, 2, 1
Area per Carton	100 ft²
Cartons per Pallet	30

TECHNICAL SPECIFICATIONS

Property	Test Method	Result
Material Thickness	ASTM D 5147	45 Mils Nom.
Flexibility @ -20°F	ASTM D 1970	Pass
Vapor Permeance	ASTM E 96	<.01
Nail Sealability	ASTM D 1970	Pass
Tensile MD	ASTM D 2523	32 lbs/in
Tensile CMD	ASTM D 2523	33 lbs/in
Elongation MD	ASTM D 2523	788%
Elongation CMD	ASTM D 2523	779%
Adhesion to Plywood @ 75°F	ASTM D 903/1970	51 lbs/ft
Adhesion to Plywood @ 40°F	ASTM D 903/1970	14 lbs/ft

PRODUCT NUMBERS

Aluminum	White	Gray	Almond
36" - 50036	36" - 50W36	36" - 50G36	36" - 50A36
18" - 50018	18" - 50W18	18" - 50G18	18" - 50A18
12" - 50012	12" - 50W12	12" - 50G12	12" - 50A12
9" - 50009	9" - 50W09	9" - 50G09	9" - 50A09
6" - 50006	6" - 50W06	6" - 50G06	6" - 50A06
4" - 50004	4" - 50W04	4" - 50G04	4" - 50A04
3" - 50003	3" - 50W03	3" - 50G03	3" - 50A03

APPROVALS
Peel & Seal® is tested to ASTM D 1970 and meets the requirements of ICC-ES AC-75, Florida Building Code FL# 11842.2, FL# 13025.1, FL# 13025.2, has a UL Class "A" Fire Rating, and is Miami-Dade County Approved. Texas Dept. of Insurance RC38.

ICC ES | FBC Florida Building Commission | ASTM | MIAMI-DADE COUNTY APPROVED

10-YEAR LIMITED WARRANTY
MFM Building Products Corp. (MFM) warrants materials to be free from leaks caused by defects in material or manufacturing for a period of ten (10) years from the date of purchase when applied according to published directions.

For the most current Installation Instructions, Warranties, Technical Specifications and Approvals, visit www.mfmbp.com.

Peel & Seal® is protected by U.S. Patent Nos. 4,936,938; 5,096,759 and 5,142,837.
*WeatherBond is a trademark of WeatherBond.

mfm BUILDING PRODUCTS CORP.

525 Orange Street, PO Box 340, Coshocton, Ohio 43812 • Tel 800-882-7663 • Fax 740-622-6161 • www.mfmbp.com

TDS-P&S 04/07 Revised 08/13

S/JCT and S/HJCT Steel-Joist Connectors

SIMPSON Strong-Tie

This product is preferable to similar connectors because of a) easier installation, b) higher loads, c) lower installed cost, or a combination of these features.

The S/JCT and S/HJCT are unique, skewable steel-joist framing connectors that combine strength, versatility and low installed cost. The connectors can be used with CFS headers, wood headers, steel I-beams (with welds or PAF fasteners) and masonry walls. Installed cost is minimized since these products are shear rather than bearing connectors, eliminating the need for web stiffeners. The connectors also feature horizontal tabs that facilitate top flange alignment and joist support during screw installation.

Material: S/JCT — 68 mil (14 ga.); S/HJCT — 97 mil (12 ga.)

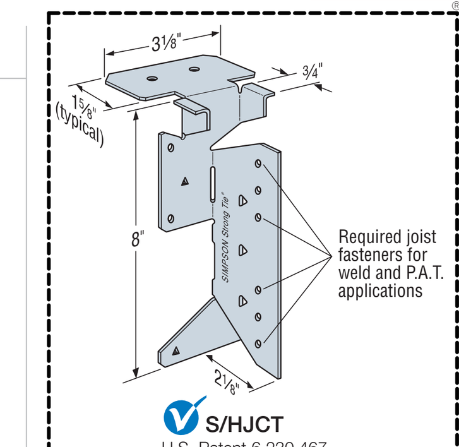
Finish: Galvanized

Features:
- Uni-directional: Joist can be attached from left or right
- One size fits joists 8" through 14" deep
- Optional holes for additional load capacity
- Simplicity of design
- Quick and easy installation
- Field skewable up to 45° left or right

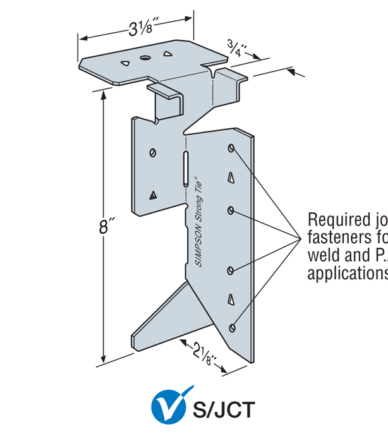
Installation:
- Attach hanger with specified fasteners. Use round holes for minimum load, use round and triangle holes for maximum load.
- May be used for weld-on applications. The minimum required weld to the top flange is ⅛" x 2½" fillet weld to each side of top flange. Consult the code for special considerations when welding galvanized steel.
- May be installed using PDPAT-62KP (0.157" x ⅝") powder-actuated fasteners. Steel headers with thicknesses between ¼" and ¾" having a minimum F_y = 36 ksi. A Red (level 5) or Purple (level 6) powder load may be required to achieve specified penetration (p). See illustration on p. 253.

Codes: See p. 11 for Code Reference Key Chart

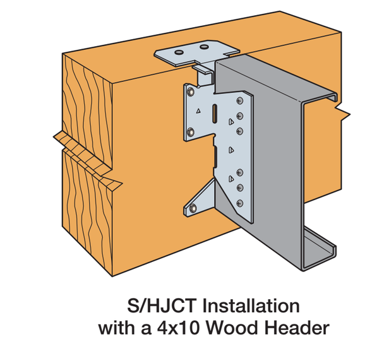
Ordering Information: The S/JCT is sold in cartons of 50. The S/HJCT is sold in kits as the S/HJCT-KT and contains five (5) connectors and (95) #14 screws.



S/HJCT
U.S. Patent 6,230,467



S/JCT



S/HJCT Installation with a 4x10 Wood Header

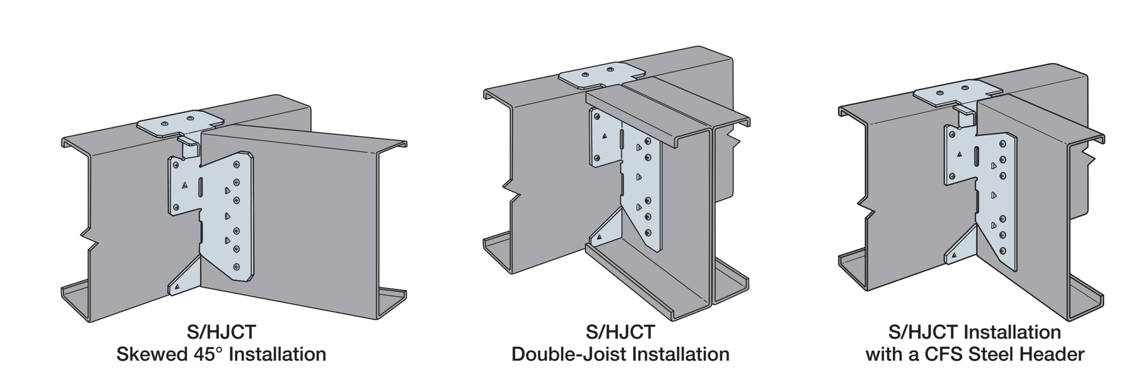
Model No.	Fasteners⁷ Top	Fasteners⁷ Face	Fasteners⁷ Joist	Allowable Load¹ Uplift	Allowable Load¹ Down	Code Ref.
Attached to CFS Header: 54 mil (16 ga.)³ — Straight Hanger						
S/JCT (min.)	(1) #10	(2) #10	(4) #10	940	1,195	IP1 L2 FL
S/JCT (max.)	(1) #10	(4) #10	(6) #10	1,435	2,105	
S/HJCT (min.)	(2) #10	(4) #14	(6) #14	1,510	2,920	
S/HJCT (max.)	(2) #10	(8) #14	(9) #14	1,670	3,855	
Attached to CFS Header: 54 mil (16 ga.)³ — Skewed Hanger						
S/JCT (min.)	(1) #10	(2) #10	(4) #10	940	1,135	
S/JCT (max.)	(1) #10	(4) #10	(6) #10	940	1,185	
S/HJCT (min.)	(2) #10	(4) #10	(6) #14	1,510	2,305	
Attached to Steel Header⁴ — Straight and Skewed Hanger						
S/JCT (min.)	⅛" x 2½" fillet weld to each side of top flange		(4) #10	145	940	
S/HJCT (min.)			(4) #14	195	1,450	
S/HJCT (min.) Skew			(4) #14	195	1,235	
S/JCT (min.)	(2) 0.157" x ⅝" powder-actuated fastener⁸		(4) #10	145	750	170
S/HJCT (min.)			(4) #14	195	1,185	
Attached to Masonry — Straight and Skewed Hanger						
S/HJCT (min.)	(2) ¼" x 2¼" Titen	(4) ¼" x 2¼" Titen	(6) #14	710	1,785	
S/HJCT (min.) Skew				710	1,410	

Model No.	Fasteners⁷ Top	Fasteners⁷ Face	Fasteners⁷ Joist	Allowable Load¹˒² Uplift (160)	Allowable Load¹˒² Down (100)	Code Ref.
Attached to 4x DF/SP Wood Header — Straight Hanger						
S/JCT (min.)	(1) 10d	(2) 10d	(4) #10	555	945	IP1 L2 FL
S/JCT (max.)	(1) 10d	(4) 10d	(6) #10	945	1,465	
S/HJCT (min.)	(2) 10d	(4) ¼"x3" SDS	(6) #14	1,210	2,625	
S/HJCT (max.)	(2) 10d	(8) ¼"x3" SDS	(9) #14	1,475	2,980	
Attached to 4x DF/SP Wood Header — Skewed Hanger						
S/JCT (min.)	(1) 10d	(2) 10d	(4) #10	390	845	
S/JCT (max.)	(1) 10d	(4) 10d	(6) #10	775	1,300	
S/HJCT (min.)	(2) 10d	(4) ¼" x 3" SDS	(6) #14	1,210	1,935	

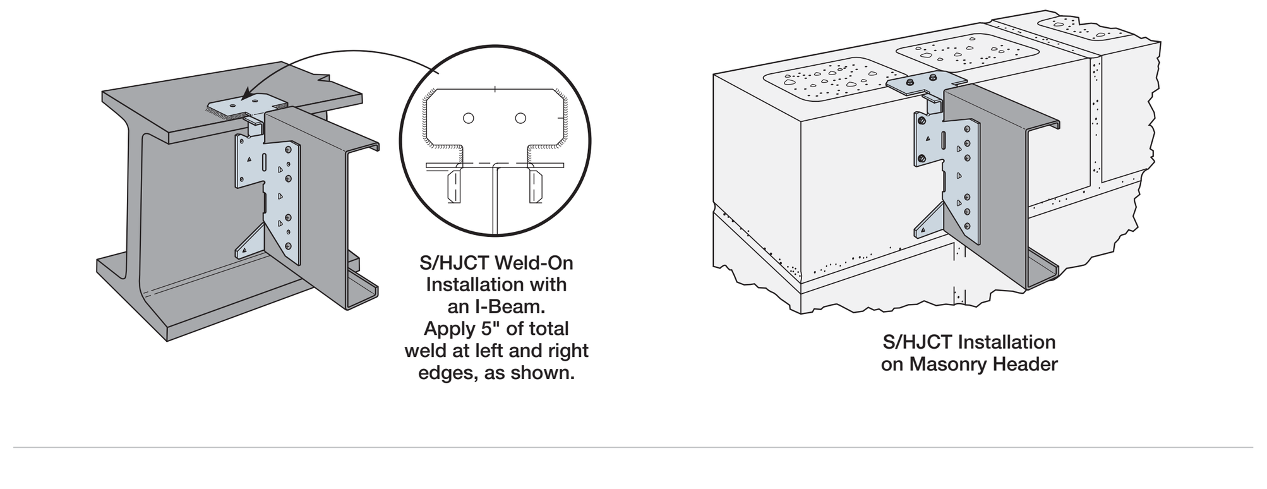
1. Allowable loads are based on on a minimum of single 54 mil (16 ga.) CFS joist member. CFS joist shall be laterally braced per Designer specification.
2. Allowable loads for wood header are based on 4x DF/SP minimum, for SPF/HF wood species use an adjustment factor of 0.72.
3. CFS header must be braced to prevent web buckling per Designer specification and header must have full bearing of 1⅝" flange-depth.
4. Backing in the steel beam cavity is not required behind the hanger for load listed.
5. Screws shall be installed using joist hanger holes screwing through the hanger into the joist.
6. CFS joists with up to a 0.50" gap (short cut), use an adjustment factor of 0.87 and joists with a 0.50" to 0.90" gap (short cut), use an adjustment factor of 0.75.
7. See pp. 138 through 171 for more information on Simpson Strong-Tie fasteners.
8. See p. 253 for more information.

S/JCT and S/HJCT Steel-Joist Connectors

SIMPSON Strong-Tie

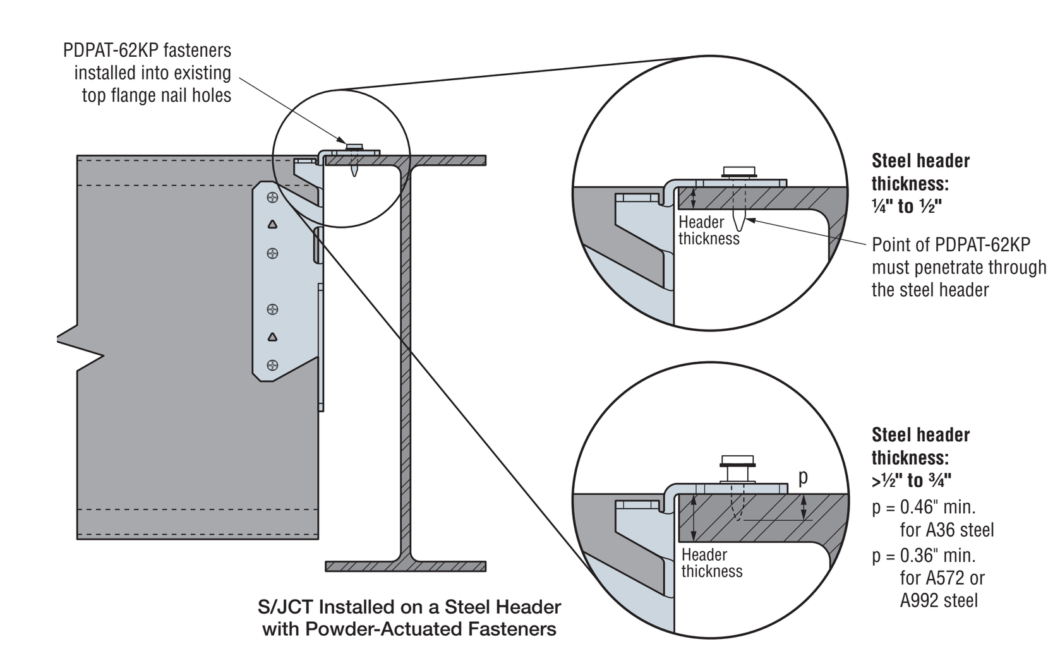


S/HJCT Skewed 45° Installation | S/HJCT Double-Joist Installation | S/HJCT Installation with a CFS Steel Header



S/HJCT Weld-On Installation with an I-Beam. Apply 5" of total weld at left and right edges, as shown.

S/HJCT Installation on Masonry Header



S/JCT Installed on a Steel Header with Powder-Actuated Fasteners

INSTALL GUIDE: ACM/FIBER CEMENT PANELS 1

INSTALL GUIDE: ACM/FIBER CEMENT PANELS 2

INSTALL GUIDE: MCELROY METAL WAVE PANELS

INSTALL GUIDE: PVC PANELS

INSTALL GUIDE: POLYCARBONATE ROOF SYSTEM

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

2022-21_Midwest_Lee's Summit.pln

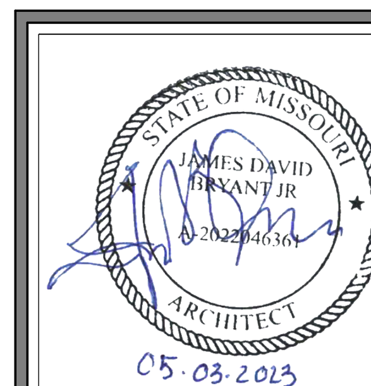
MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA RETAIL TOWER 2023

NEW CAR WASH FOR:

TUNNEL VISION CAR WASH

20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081



USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

SHEET:

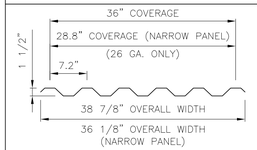
MW-7.2

MATERIAL SPECS

McELROY METAL, INC

www.mcelroymetal.com

Mega-Rib Panel | Product Data

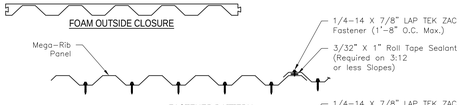


MEGA-RIB PROFILE

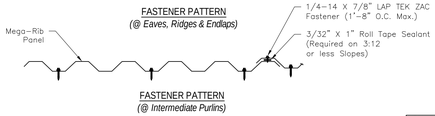
NOTE:
All data represented on this sheet may not be applicable to all widths and gauges. Please contact McElroy Metal for more information.

FOAM INSIDE CLOSURE

FOAM OUTSIDE CLOSURE



FASTENER PATTERN
(@ Eaves, Ridges & Endlaps)



FASTENER PATTERN
(@ Intermediate Purlins)

Applications
Exposed fastener wall/roof panel used on slopes down to 1:12. Tape sealant is required on seam (side-laps). Standard panel lengths up to 40'. Please inquire for longer lengths.

Substrates
Plywood or Purlins.

Material
Standard - 24 GA. Steel ASTM A792 (50 ksi) AZ55 - Bare
AZ50 - Painted
Optional - 22 GA. Steel ASTM A792 (50 ksi) AZ55 - Bare
AZ50 - Painted
- 18 GA. and 20 GA. Steel ASTM A792 (50 ksi) AZ50 - painted coil only

Manufacturing
Roll formed in factory.

Finishes
Acrylic Coated Galvalume®
Fluoropolymer (Kynar 500® PVDF resin-based)
Siliconized Polyester and Polyester

Pan Conditions
Oil canning is inherent in all metal panels and is not cause for panel rejection. A signed pan wave acknowledgement will be required for all orders prior to production.

Testing
Uplift: UL 580 Class 90, ASTM E1592
Impact Resistance: UL 2218 Class 4
ICC-ES Evaluation on 24 GA.
Fire Resistance: UL 263 & UL 790 Class A
Florida Product Approval: FL 1832.8 (non-structural)
FL 1747.6 (structural)
Miami Dade Approval: NOA# 13-0617.21

REVISION DATE: 10/06/14

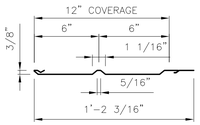
MEGA-RIB PAGE 1 of 1

p. 21

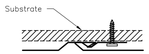
McELROY METAL, INC

www.mcelroymetal.com

Matrix Soffit Panel | Product Data



MATRIX PROFILE



MATRIX SEAM

Applications
Concealed fastener soffit/wall panel. Standard panel lengths from 0'-6" to 25'.

Substrates
Plywood, Hat Section, Mac-Girts, or Wall Girts.

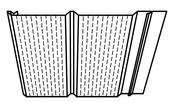
Material
Standard - 24 GA. ASTM A792 (50 ksi steel) AZ55 - Bare
AZ50 - Painted
- 29 GA. ASTM A792 (80 ksi steel) AZ55 - Bare
AZ50 - Painted

Manufacturing
Roll formed in factory. (Marshall Plant Only)

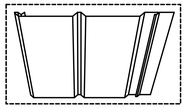
Finishes
Acrylic Coated Galvalume®
Fluoropolymer (Kynar 500® PVDF resin-based)

Pan Conditions
Vented or Non-Vented
Ventilation = 10% Net Free Air
Oil canning is inherent in all metal panels and is not cause for panel rejection. A signed pan wave acknowledgement will be required for all orders prior to production.

Testing *
Uplift: ASTM E1592
Testing and Approvals are product specific. Please inquire for details.



VENTED PANEL
(10% Net Free Air)



NON-VENTED PANEL

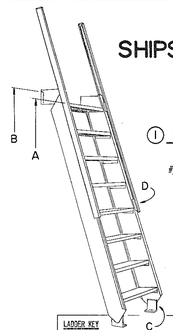
REVISION DATE: 5/15/15

MATRIX PAGE 1 of 1

p. 31

EQUIPTO

SHIPS LADDER ASSEMBLY INSTRUCTIONS

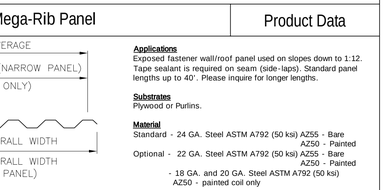


LADDER KEY
A = TOP TREAD HEIGHT
B = TOP MOUNTING HOLE HEIGHT
C = BASE ANGLE NUMBERS
D = BOLTING LOWER HANDRAIL BRACKET AND TREAD ASSEMBLY TOGETHER.

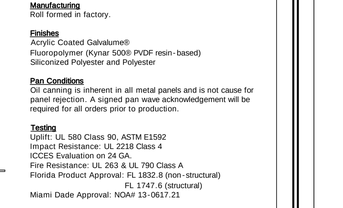
	A	B	C	D
#930L11	10' 7-3/8"	10' 10-5/8"	1 & 2	4
11 Treads	10' 6-5/8"	10' 9-7/8"	2 & 3	4
3' 8" Run	10' 5-7/8"	10' 9-1/8"	3 & 4	4
	10' 5-1/8"	10' 8-3/8"	4 & 5	4
#930L10	9' 7-3/4"	9' 11"	1 & 2	3
10 Treads	9' 7"	9' 10-1/4"	2 & 3	3
3' 5" Run	9' 6-1/4"	9' 9-1/2"	3 & 4	3
	9' 5-1/2"	9' 8-3/4"	4 & 5	3
#930L09	8' 8-1/8"	8' 11-3/8"	1 & 2	2
9 Treads	8' 7-3/8"	8' 10-5/8"	2 & 3	2
3' 2" Run	8' 6-5/8"	8' 9-7/8"	3 & 4	2
	8' 5-7/8"	8' 9-1/8"	4 & 5	2
#930L08	7' 8-5/8"	7' 11-7/8"	1 & 2	4
8 Treads	7' 7-7/8"	7' 11-1/8"	2 & 3	4
2' 11" Run	7' 7-1/8"	7' 10-3/8"	3 & 4	4
	7' 6-3/8"	7' 9-5/8"	4 & 5	4
#930L07	6' 9"	7' 0-1/4"	1 & 2	3
7 Treads	6' 8-1/4"	6' 11-1/2"	2 & 3	3
2' 8" Run	6' 7-1/2"	6' 10-3/4"	3 & 4	3
	6' 6-3/4"	6' 10"	4 & 5	3
#930L06	5' 9-3/8"	5' 0-5/8"	1 & 2	4
6 Treads	5' 8-5/8"	5' 11-7/8"	2 & 3	4
2' 5" Run	5' 7-7/8"	5' 11-1/8"	3 & 4	4
	5' 7-1/8"	5' 10-3/8"	4 & 5	4
#930L05	4' 9-3/4"	5' 1"	1 & 2	3
5 Treads	4' 9"	5' 0-1/4"	2 & 3	3
2' 2" Run	4' 8-1/4"	4' 11-1/2"	3 & 4	3
	4' 7-1/2"	4' 10-3/4"	4 & 5	3
#930L04	3' 10-1/4"	4' 1-1/2"	1 & 2	2
4 Treads	3' 9-1/2"	4' 0-3/4"	2 & 3	2
1' 11" Run	3' 8-3/4"	4' 0"	3 & 4	2
	3' 8"	3' 11-1/4"	4 & 5	2

41625

(1) Mounting Bracket Assembly



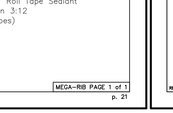
(1A) Bolting Mounting Brackets to Mezzanine Beam



(1B) Attaching Hanger Brackets to Mezzanine Grating

(1C) Bolting Mounting Brackets to Hanger Brackets

NOTE: R.H. MOUNTING BRACKET to be bolted to L.H. HANGER BRACKET. L.H. MOUNTING BRACKET to be bolted to R.H. HANGER BRACKET.



(1D) Anchoring Mounting Brackets to Existing Walls

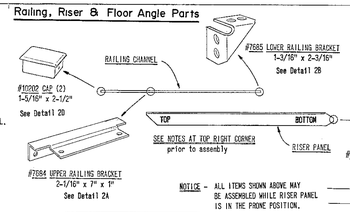
NOTE: ALL HARDWARE FOR ANCHORING MOUNTING BRACKETS TO WALL TO BE FURNISHED BY OTHERS.

Ladder Assembly Procedure

STEP 1. ANCHORING MOUNTING BRACKETS.
STEP 2. RISER AND RAILING ASSEMBLY.
STEP 3. TOP TREAD AND MOUNTING BRACKET ASSEMBLY.
STEP 4. RISER TO MOUNTING BRACKET ASSEMBLY.
STEP 5. LADDER TREAD ASSEMBLY.
STEP 6. ASSEMBLING TREAD TO RISER PANEL.

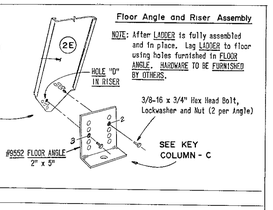
NOTE: CLEAR AREA OF OBSTRUCTIONS BEFORE STARTING LADDER ASSEMBLY.

Railing, Riser & Floor Angle Parts



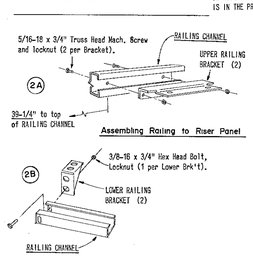
NOTICE - ALL ITEMS SHOWN ABOVE MAY BE ASSEMBLED WHILE RISER PANEL IS IN THE PRONE POSITION.

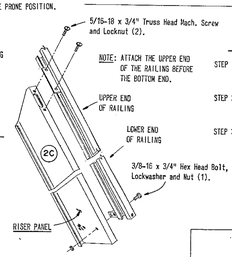
Floor Angle and Riser Assembly



NOTE: After LADDER is fully assembled and in place, Lag LADDER to floor using holes furnished in FLOOR ANGLE. HARDWARE TO BE FURNISHED BY OTHERS.

Assembling Railing to Riser Panel

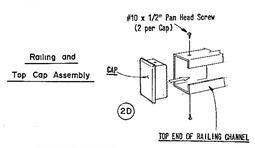




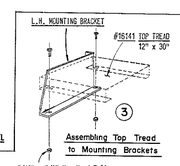
Railing Assembly Procedure

STEP 1. FASTEN UPPER RAILING BRACKETS TO RAILING CHANNELS AS SHOWN ON DETAIL 2A,
STEP 2. FASTEN LOWER RAILING BRACKETS TO RAILING CHANNEL AS SHOWN ON DETAIL 2B.
STEP 3. ATTACH UPPER END OF THE RAILING CHANNEL TO THE RISER PANEL, BOLTING THROUGH THE UPPER RAILING BRACKET AND THE RISER.
FASTEN THE LOWER END OF THE RAILING CHANNEL TO THE RISER PANEL, BOLTING THROUGH THE LOWER RAILING BRACKET AND THE RISER. SEE DETAIL 2C.

Railing and Top Cap Assembly

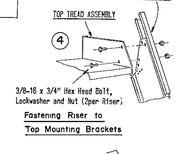


Assembling Top Tread to Mounting Brackets

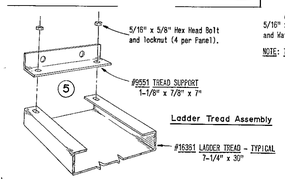


NOTE: TIGHTEN BOLTS SECURELY.

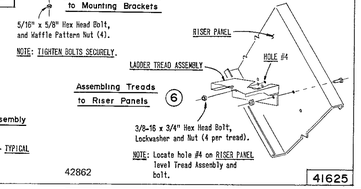
Fastening Riser to Top Mounting Brackets



Ladder Tread Assembly



Assembling Treads to Riser Panels



NOTE: Locate hole #4 on RISER PANEL level Tread Assembly and bolt.

42862

41625

INSTALL GUIDE: ACM/FIBER CEMENT PANELS 1

INSTALL GUIDE: ACM/FIBER CEMENT PANELS 2

INSTALL GUIDE: MCELROY METAL WAVE PANELS

INSTALL GUIDE: PVC PANELS

INSTALL GUIDE: POLYCARBONATE ROOF SYSTEM

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

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MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

33 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JAMES DAVID MOHNEN III
NUMBER A-6
ARCHITECT
05.03.2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

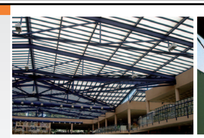
SHEET:

MW-7.3

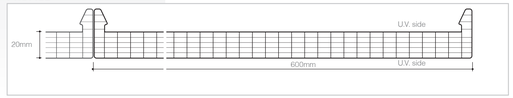
MATERIAL SPECS

2.2
MODULAR
CONNECTOR SYSTEMS

arcoPlus® Reversò 626




PROFILE



Modular system of bi-protected multiwall polycarbonate for translucent roofing applications

Caleido
LIGHT MANAGEMENT
IR AR
PRODUCT AVAILABLE WITH IR AND AR TREATMENT

PRODUCTION STANDARDS

thickness	20mm
structure	6 walls
effective modular width	600mm
panel length	no limit
colours available	see page 11

TECHNICAL FEATURES

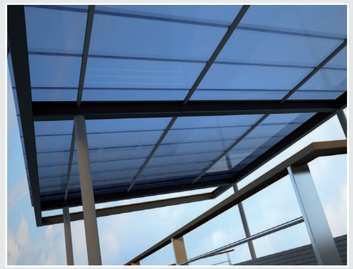
Thermal insulation	1,7 W/m²K
Acoustic insulation	20 dB
Linear thermal expansion	0,065mm/m°C
Temperature range	-40°C +120 °C
U.V. rays protection	2 sides Coextrusion
Fire reaction EN 13501	EuroClass B-s1,d0

DESCRIPTION

arcoPlus®626 reversò is a modular system of coextruded six-wall polycarbonate panels with a thickness of 20mm.
These are fixed to the existing structure using specific anchor brackets. The panels are joined together by a protected polycarbonate cover plate assembled using a click-on system, or by an aluminium connector, for a perfectly watertight seal.

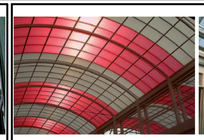
ADVANTAGES

- Easy and low-cost installation
- Light transmission
- Resistance to U.V. rays and to hail
- Heat insulation
- Bendability R.min=2,5m



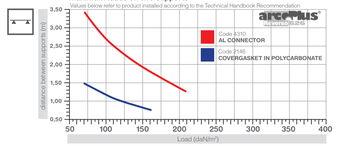
APPLICATIONS

- Roofing
- Curved roofing
- Bardages verticaux

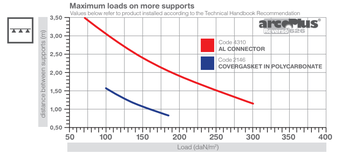



FLAT SYSTEM LOAD RESISTANCE

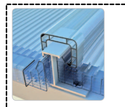
Maximum loads on two supports
Values below refer to product installed according to the Technical Handbook Recommendation



Maximum loads on more supports
Values below refer to product installed according to the Technical Handbook Recommendation

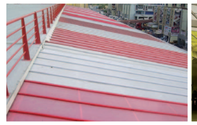



SYSTEM WITH ALUMINIUM CONNECTOR CODE 4310


SYSTEM WITH POLYCARBONATE COVERGASKET CODE 2146

EASY AND LOW-COST INSTALLATION

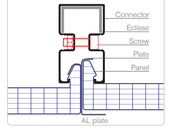
To ensure compliance with snow load and negative wind load resistance requirements, anchor brackets should be fitted for each purlin.
The polycarbonate panels are fastened to the underlying structure using specific brackets, which must be anchored to the purlins using suitable self-drilling/self-tapping screws (on metal structures) and tap bolts (for wooden structures). These screws and bolts are not supplied.
Different connector profiles can be used, depending on the required load specifications.

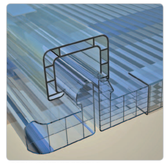


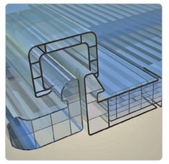

COMPLETE ROOFING SYSTEM

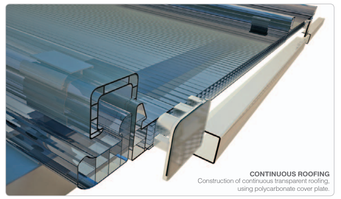
Modular multiwall polycarbonate panels for the construction of flat or curved roofing. The panels are anchored to the supporting structure using specific aluminium brackets to guarantee load strength. Depending on the load capacity values required, or the distance between the purlins of the underlying structures, either polycarbonate cover plates can be used or, for greater strength, aluminium connectors.

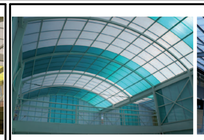
DETAIL
of fitting connector with screw




DETAIL OF START PROFILE
Iart profile with panel, cover plate, plate and air cell cover profiles.

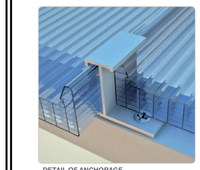

DETAIL OF END PROFILE
Detail of insertion of section-breaker profile to complete roofing.

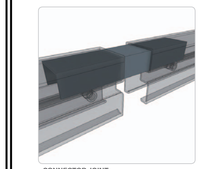

CONTINUOUS ROOFING
Construction of continuous transparent roofing, using polycarbonate cover plate.



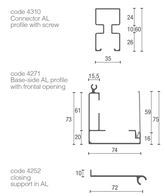

ACCESSORIES

The arcoPlus® system includes a complete range of accessories to facilitate installation.
The air cells of the panels must be sealed using a specific polycarbonate profile or vented aluminium breather tape. This allows correct ventilation and prevents soiling on the inside.


DETAIL OF ANCHORAGE
Profiles anchored to supporting structures using aluminium plates.

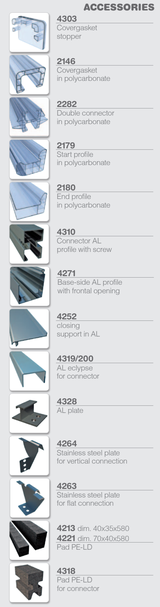

CONNECTOR JOINT
AL connector profiles with eclipse.

METAL PROFILES




4329 Guarnizione PE-LD 4x15mm
4316 M6 nut
4315 M6 x 20 screw
Accessories for connector
2182 Block cover
4327 Additional tape

ACCESSORIES


4303 Covergasket stopper
2146 Covergasket in polycarbonate
2282 Double connector in polycarbonate
2179 Start profile in polycarbonate
2180 End profile in polycarbonate
4310 Connector AL profile with screw
4271 Base-side AL profile with frontal opening
4252 closing support in AL
4319/200 AL eclypse for connector
4328 AL plate
4264 Stainless steel plate for vertical connection
4263 Stainless steel plate for flat connection
4213 dim. 40x35x580
4221 dim. 70x40x580
Pad PE-LD
4318 Pad PE-LD for connector

DELPRO 1238™ 1638™

INTERLOCKING PVC PANEL

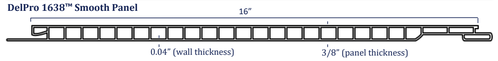
• AGRICULTURAL • INDUSTRIAL • COMMERCIAL • RESIDENTIAL •

• ABOUT DELPRO 1238™ AND DELPRO 1638™ •

- ✓ Distinctive Tongue and Groove System
- ✓ Quick and Easy Installation
- ✓ Low Maintenance
- ✓ Easy to Clean
- ✓ Economical
- ✓ No Painting Required
- ✓ Bright White, Extremely Smooth Panels
- ✓ Made with 100% Exterior Grade Virgin PVC Formula *tried and tested for two decades*
- ✓ CFIA Approved
- ✓ Hidden Fastener
- ✓ CAN ULC S102.2 Fire Rating Approved
- ✓ 12" and 16" Wide Panels
- ✓ 25 Year Warranty

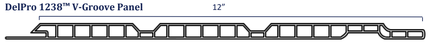
• SPECIFICATIONS •

DelPro 1638™ Smooth Panel



DelPro 1238™ Smooth Panel

DelPro 1238™ V-Groove Panel



with a **wall thickness of 0.04"** and an **overall panel thickness of 3/8"** it's the most durable PVC panel on the market.

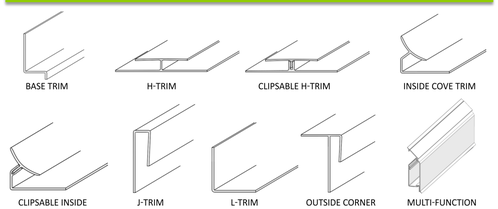
• ENJOY THE STRENGTH •

Our panels provide an **efficient and a stylish finish** for walls and ceilings. DelPro 1238™ and DelPro 1638™ can be used in new and retrofit applications. The high quality interlocking PVC wall and ceiling panels are **easy to install** and virtually **maintenance free.**

•DISCOVER THE *BEAUTY*•

The **water resistant quality** makes DelPro 1238™ and DelPro 1638™ a durable cladding for walls and ceilings, particularly in damp areas. With a **strong resistance to color change and fading**, DelPro 1238™ and DelPro 1638™ will **neither delaminate, rot, nor absorb water.**

• DELPRO 1238™ AND DELPRO 1638™ TRIM •



• WHY A PANEL THICKNESS OF 3/8" IS BETTER THAN 1/2" •

In the PVC wall paneling industry, unlike lumber, thicker is not always better. The interior walls and the space between the front and back wall of the panel, are the weaker parts of the overall design. If you increase this space (the thicker the panel, the more you stretch the interior wall), you have now effectively decreased the overall impact strength of your panel. Therefore, a 3/8" panel is much stronger and longer lasting than a 1/2" panel.

• WHY DELPRO 1238™ AND DELPRO 1638™ AREN'T WIDER THAN 16" •

If you have weight or tension on the panel (insulation or an angled fastener) it creates pressure between both ends and eventually the panel starts to bow or sag. In the PVC paneling industry, it is proven that 16" is the best and maximum width to use. *Delpro 1238™* and *DelPro 1638™* are easily able to withstand these pressures and will not bow or sag.

Find out more at **www.delpro1638.com**

DELCAN PRODUCTS LTD.
Phone: 1-877-553-3632
Fax: 1-877-264-9025
sales@delcan.ca
www.delcanproducts.com

INSTALL GUIDE: ACM/FIBER CEMENT PANELS 1
INSTALL GUIDE: ACM/FIBER CEMENT PANELS 2
INSTALL GUIDE: MCELROY METAL WAVE PANELS
INSTALL GUIDE: PVC PANELS
INSTALL GUIDE: POLYCARBONATE ROOF SYSTEM

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT

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MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

34 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JAMES DAVID VERMANT JR
NUMBER A-2013038424
ARCHITECT
05.03.2023

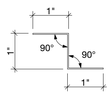
USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

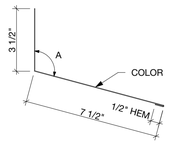
SHEET:
MW-7.4
MATERIAL SPECS

MT-13
STRETCH OUT: 3"



1" ZEE CLOSURE

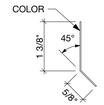
MT-35 A
STRETCH OUT: 9 1/2"



A: 90°

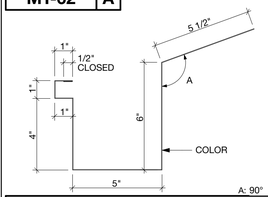
STANDARD HEADWALL TRIM

MT-37
STRETCH OUT: 2"



STANDARD CLEAT

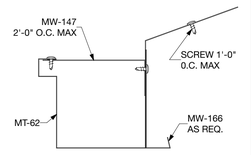
MT-62 A
STRETCH OUT: 24"



A: 90°

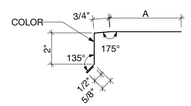
GUTTER

MT-62D
ATTACH MW-147 & MW-166 PRIOR TO INSTALLING GUTTER ON BUILDING.



GUTTER ASSEMBLY DETAIL

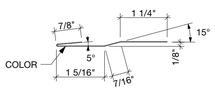
MT-177 A
STRETCH OUT: 7 7/8"



A: 4"

2" SILL TRIM

MT-193
STRETCH OUT: 3 5/8"



WAVE CLIP

MW-1 A
STRETCH OUT: 5"

A: 2"
B: 2"

CLOSED HEMS

L-TRIM - OUTSIDE (ADJ.)

MW-14 A
STRETCH OUT: 8 1/2"

A: 3 1/2"
B: 4"
C: 90°

DRIP TRIM - TOP OF WALL (ADJ.)

MW-15 A
STRETCH OUT: 7 3/4"

A: 4"
B: 1 1/4"
C: 1 1/2"
D: 97°

CLOSED HEMS

ANGLED TRANSITION ZEE (ADJ)

MW-24 A
STRETCH OUT: 7 5/8"

A: 1 3/4"
B: 1 1/8"

CLOSED HEM

DRIP TRIM - PARAPET (ADJ.)

MW-24 B
STRETCH OUT: 14 1/8"

A: 8 1/4"
B: 1 1/8"

CLOSED HEM

DRIP TRIM - PARAPET (ADJ.)

MW-24 C
STRETCH OUT: 8 5/8"

A: 2 3/4"
B: 1 1/8"

CLOSED HEM

DRIP TRIM - PARAPET (ADJ.)

MW-147 A
STRETCH OUT: 7 1/2"

RUN: 2"
A: 5 1/2"
B: 90°

GUTTER SUPPORT STRAP (ADJ.)

MW-197 A
STRETCH OUT: 27 3/4"

A: 5"
B: 9"
C: 5 1/2"
D: 5 1/4"
E: 113°
F: 46°

GUTTER 5 (ADJ.)

MW-197 B
STRETCH OUT: 27 3/4"

A: 5"
B: 9"
C: 6 1/2"
D: 5"
E: 113°
F: 45°

GUTTER 5 (ADJ.)

MW-219 A
STRETCH OUT: 7"

A: 87°

CEILING TRIM - HIGH END (ADJ.)

MW-220 A
STRETCH OUT: 7"

A: 93°

CEILING TRIM - LOW END (ADJ.)

MW-264 A
STRETCH OUT: 12"

A: 3"
B: 2 1/2"
C: 1 1/2"

VERTICAL BAND TRIM (ADJ.)

MW-175
STRETCH OUT: 2 1/2"

CLOSED HEM

MTSJ - MATRIX SOFFIT J-TRIM

MW-285 A
STRETCH OUT: 26 1/2"

A: 3"
B: 21 1/2"
C: 2"

Z-TRIM (ADJ.)

MW-285 B
STRETCH OUT: 19 1/4"

A: 3"
B: 4"
C: 12 1/4"

Z-TRIM (ADJ.)

MW-285 C
STRETCH OUT: 4 1/4"

A: 2"
B: 1 1/4"
C: 1"

Z-TRIM (ADJ.)

MW-287 A
STRETCH OUT: 11"

OPEN HEM

A: 5 1/2"
B: 3 1/4"

COLUMN WRAP CAP (ADJ.)

MW-291 A
STRETCH OUT: 12"

A: 8"
B: 169°

GUTTER SUPPORT STRAP (ADJ.)

MW-291 B
STRETCH OUT: 12"

A: 8"
B: 160°

GUTTER SUPPORT STRAP (ADJ.)

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

REVISIONS			
ID	DATE	DESCRIPTION	
0	05/03/2023	FOR PERMIT	

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

35 OF 39

NEW CAR WASH FOR:

TUNNEL VISION CAR WASH

20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JAMES DAVID BRYANT JR
2010020727
ARCHITECT
05-03-2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

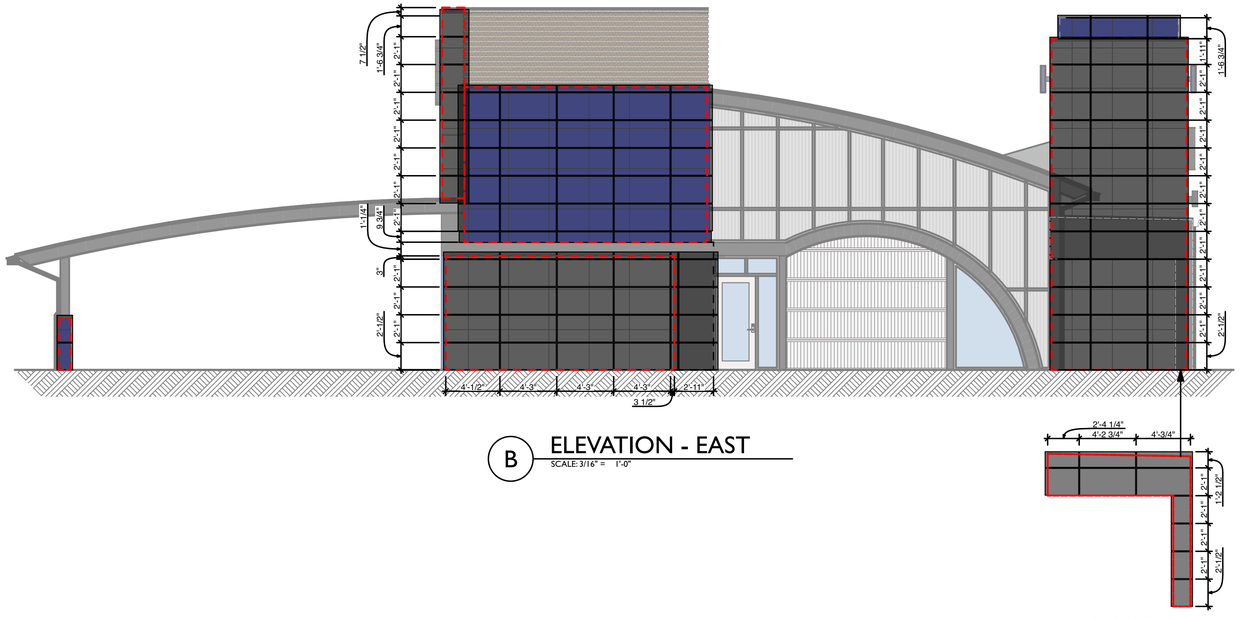
PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

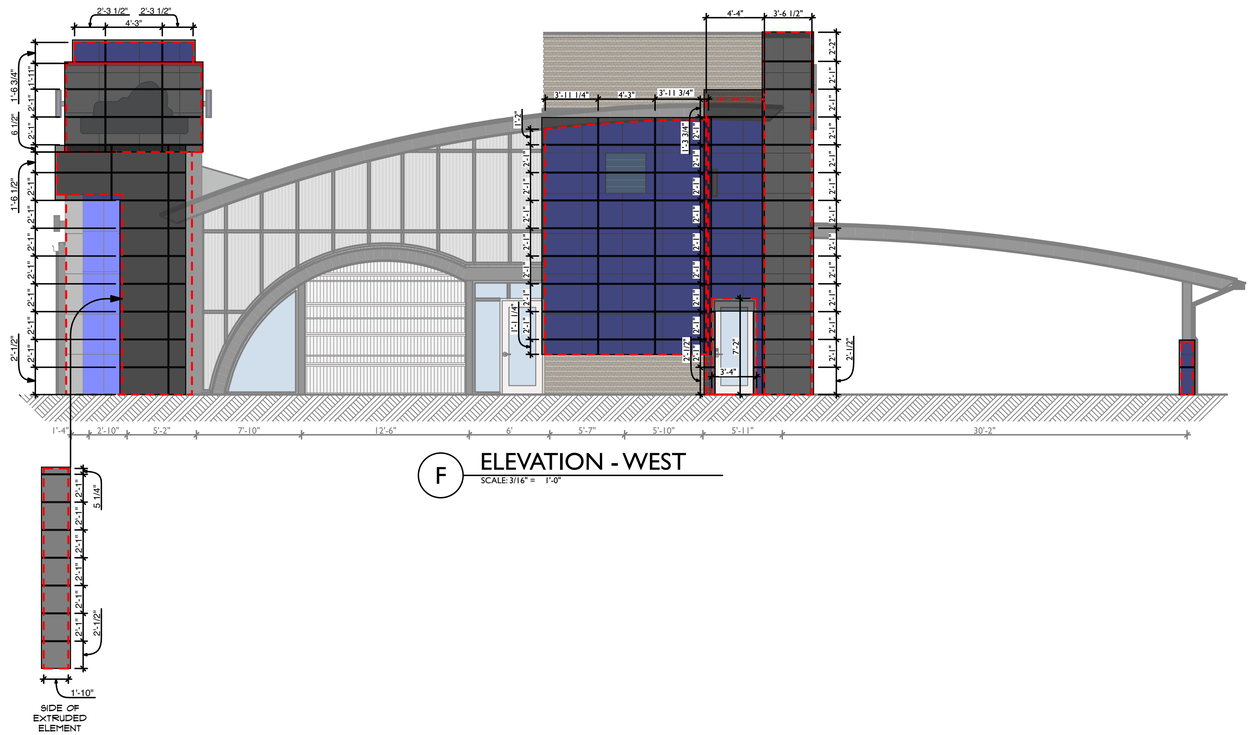
SHEET:

MW-9.1

FLASHING/TRIM



B ELEVATION - EAST
SCALE: 3/16" = 1'-0"



F ELEVATION - WEST
SCALE: 3/16" = 1'-0"

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

REVISIONS			
ID	DATE	DESCRIPTION	
0	05/03/2023	FOR PERMIT	

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

36 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JAMES DAVID ORGANTIN JR
2010020220
ARCHITECT
05.03.2023

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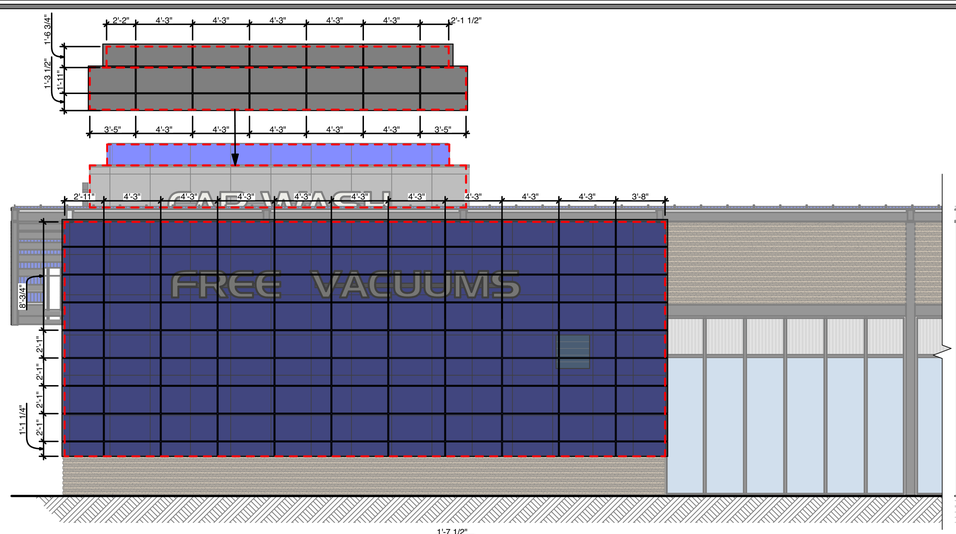
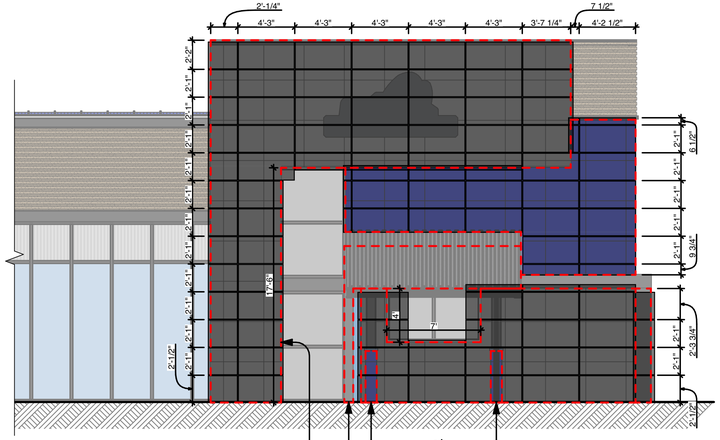
PRELIMINARY

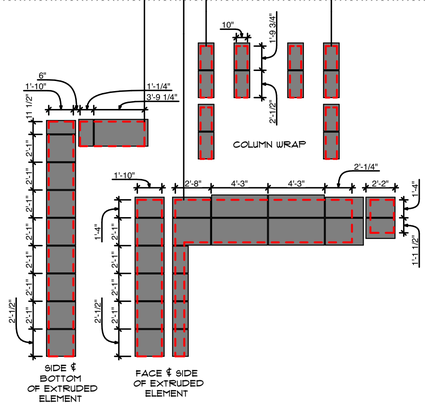
PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

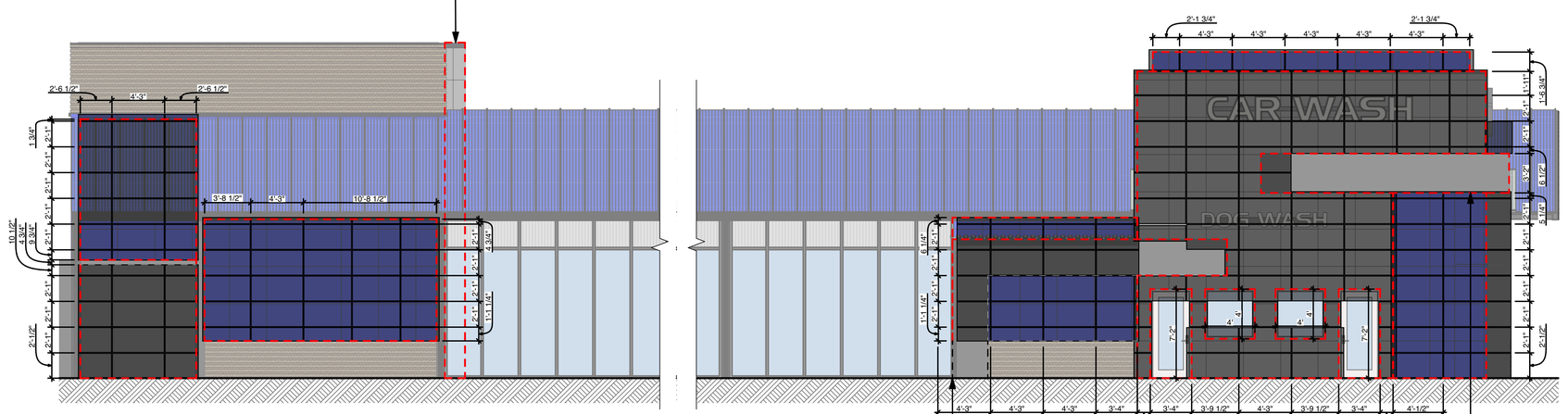
SHEET:
MW-9.2
EIFS GRID LAYOUT



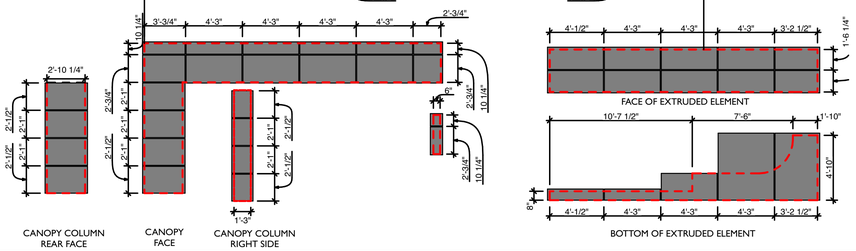
A ELEVATION - SOUTH
SCALE: 3/16" = 1'-0"







K ELEVATION - NORTH
SCALE: 3/16" = 1'-0"



DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

REVISIONS			
ID	DATE	DESCRIPTION	
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MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

37 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JASON DAVID GRANT III
2023038326
ARCHITECT
05.03.2023

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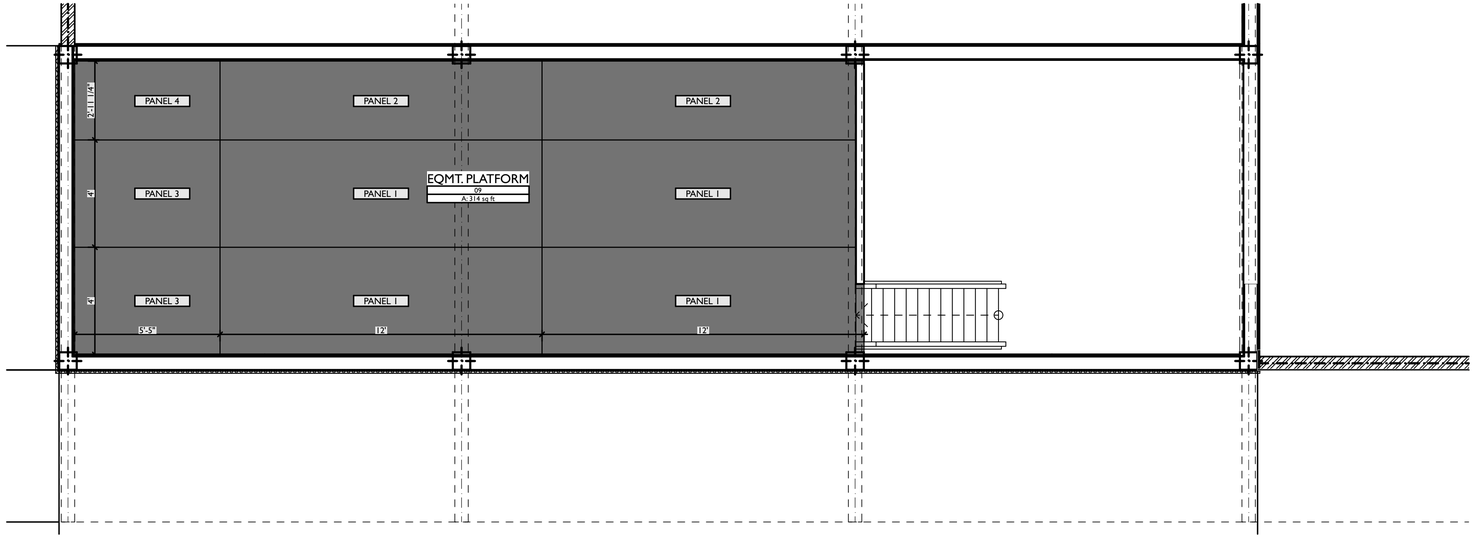
PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####

SHEET:
MW-9.3
EIFS GRID LAYOUT

PANEL 1 - 4'X12' - 4 TOTAL
PANEL 2 - 2'-11 1/4" X12' RIP TO SIZE - 2 TOTAL
PANEL 3 - 4" X 5'-5" RIP TO SIZE - 2 TOTAL
PANEL 4 - 2'-11 1/4" X 5'-5" RIP TO SIZE - 1 TOTAL
PANEL CLIPS - INSTALL 4 CLIPS PER LONG SIDE OF PANEL - 60 SUPPLIED

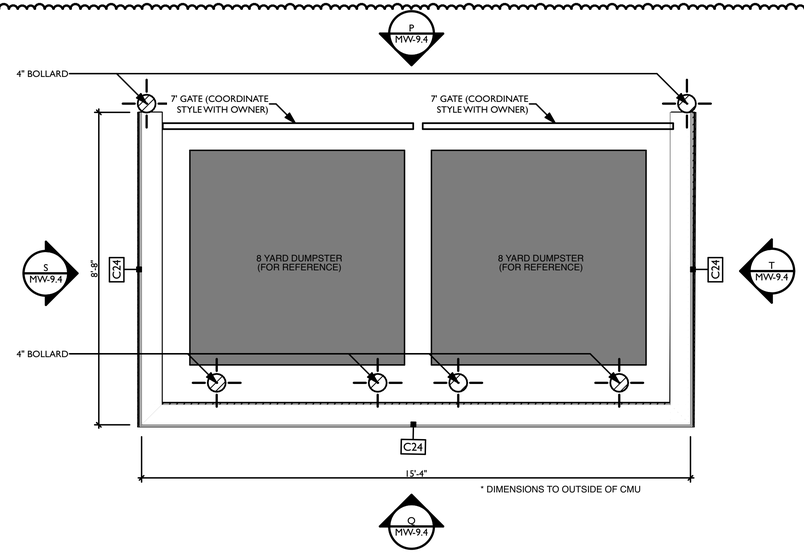
NOTE: PANELS ARE SUPPLIED IN FULL SIZE. PANELS 2, 3, AND 4 ARE TO BE CUT-TO-FIT FROM FULL SIZE PANELS ON LAYOUT PROVIDED.



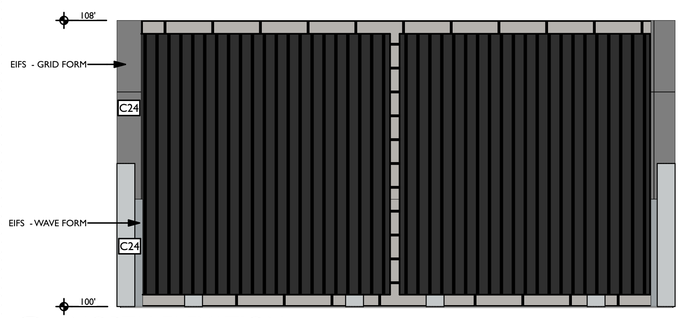
A GRATING LAYOUT - EQUIPMENT PLATFORM

NOTE: ALL COMPONENTS OF THE TRASH ENCLOSURE ARE TO BE SUPPLIED BY OTHERS.

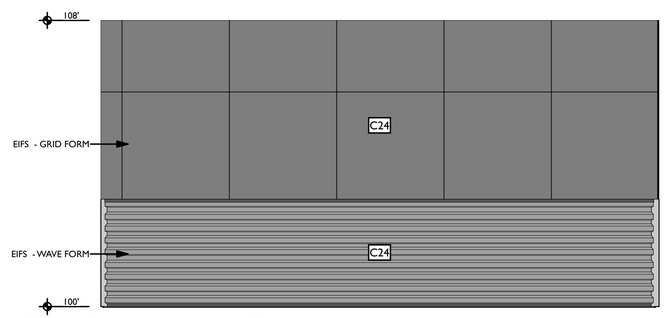
REFER TO STRUCTURAL DRAWINGS FOR CONSTRUCTION OF TRASH ENCLOSURE.



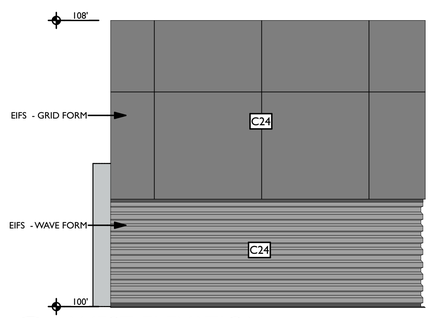
G PLAN VIEW
SCALE: 1/2" = 1'-0"



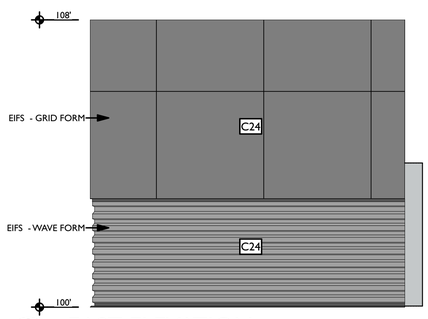
P NORTH ELEVATION
SCALE: 1/2" = 1'-0"



Q SOUTH ELEVATION
SCALE: 1/2" = 1'-0"



S WEST ELEVATION
SCALE: 1/2" = 1'-0"



T EAST ELEVATION
SCALE: 1/2" = 1'-0"

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21

REVISIONS			
ID	DATE	DESCRIPTION	BY
0	05/03/2023	FOR PERMIT	
1	06/09/2023	DRAWING TRENCH UPDATE	

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

38 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JAMES DAVID GRANT III
ARCHITECT
05.03.2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

PLOT DATE:	6/9/23
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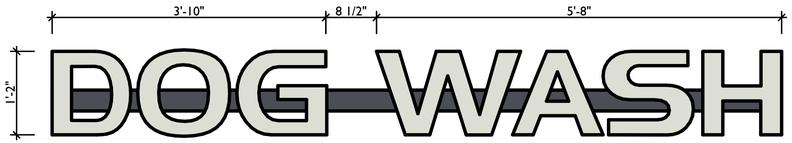
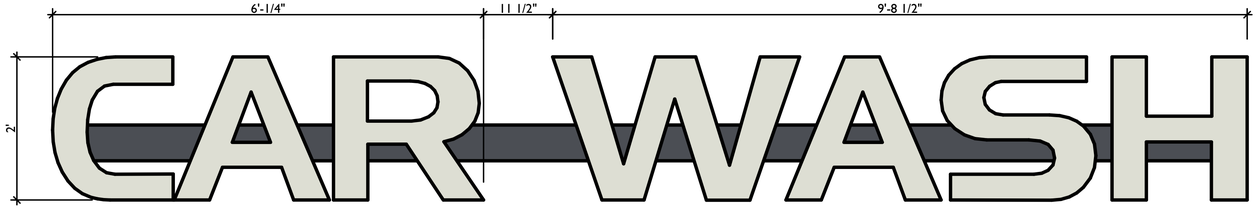
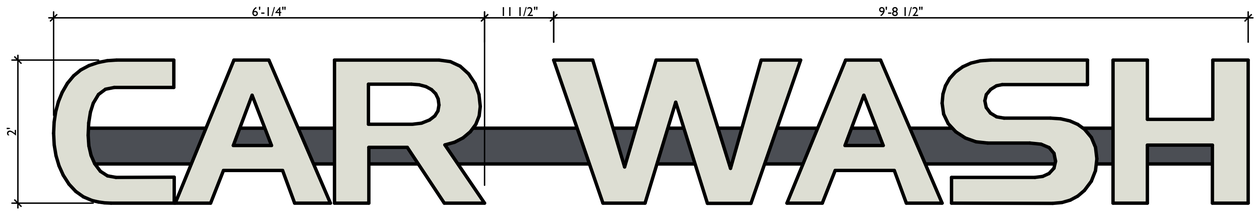
SHEET:	

MW-9.4

EQUIP GRATING & TRASH ENCLOSURE LAYOUT



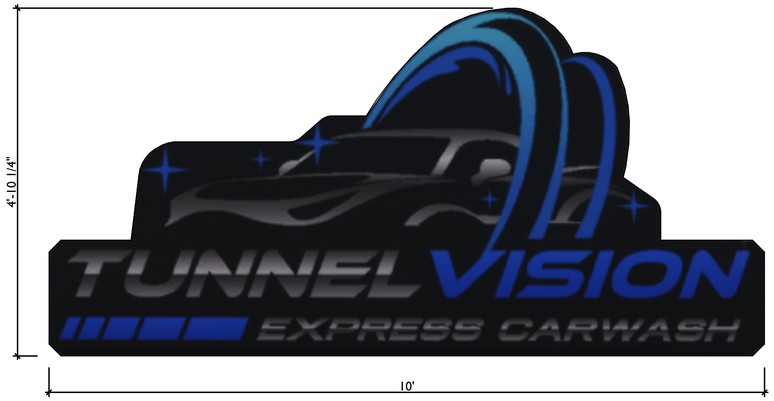




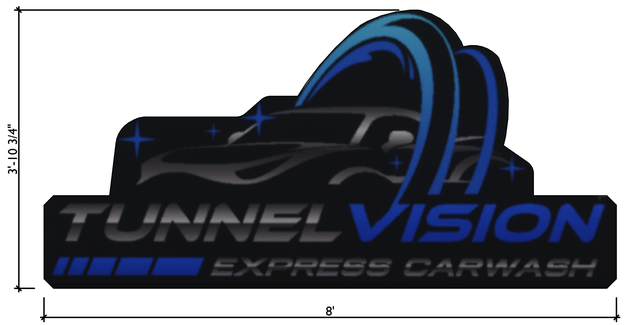
SIGNAGE COLORS:

LETTER FACE - WHITE
LETTER SIDES - BLACK
RACEWAY - GREY

A SECTION DETAIL - STAIR TREAD
SCALE: 1" = 1'-0"



NOTE: LOGO SIGNAGE TO BE PROVIDED BY OTHERS



NOTE: LOGO & SITE RELATED SIGNAGE TO BE PROVIDED BY OTHERS

REVISIONS

ID	DATE	DESCRIPTION
0	05/03/2023	FOR PERMIT
1	06/09/2023	DRAWING TRENCH UPDATE

MODERNWASH
5220 SCOTTSVILLE ROAD
BOWLING GREEN, KY 42104

MODEL: AXIOM BETA
RETAIL TOWER
2023

39 OF 39

NEW CAR WASH FOR:
TUNNEL VISION CAR WASH
20 SE THOMPSON DR
LEE'S SUMMIT, MO 64081

STATE OF MISSOURI
JAMES DAVID BRYANT JR
A-2021046361
ARCHITECT
06.09.2023

USE QR CODE FOR MOST CURRENT PROJECT DRAWINGS.

PRELIMINARY

PLOT DATE:	6/9/23
DRAWN BY:	EWH, CBH
CHECKED BY:	#####
SHEET:	MW-9.5

SIGNAGE

DATE OF CREATION: 09/09/21 MW JOB #: 2022-21