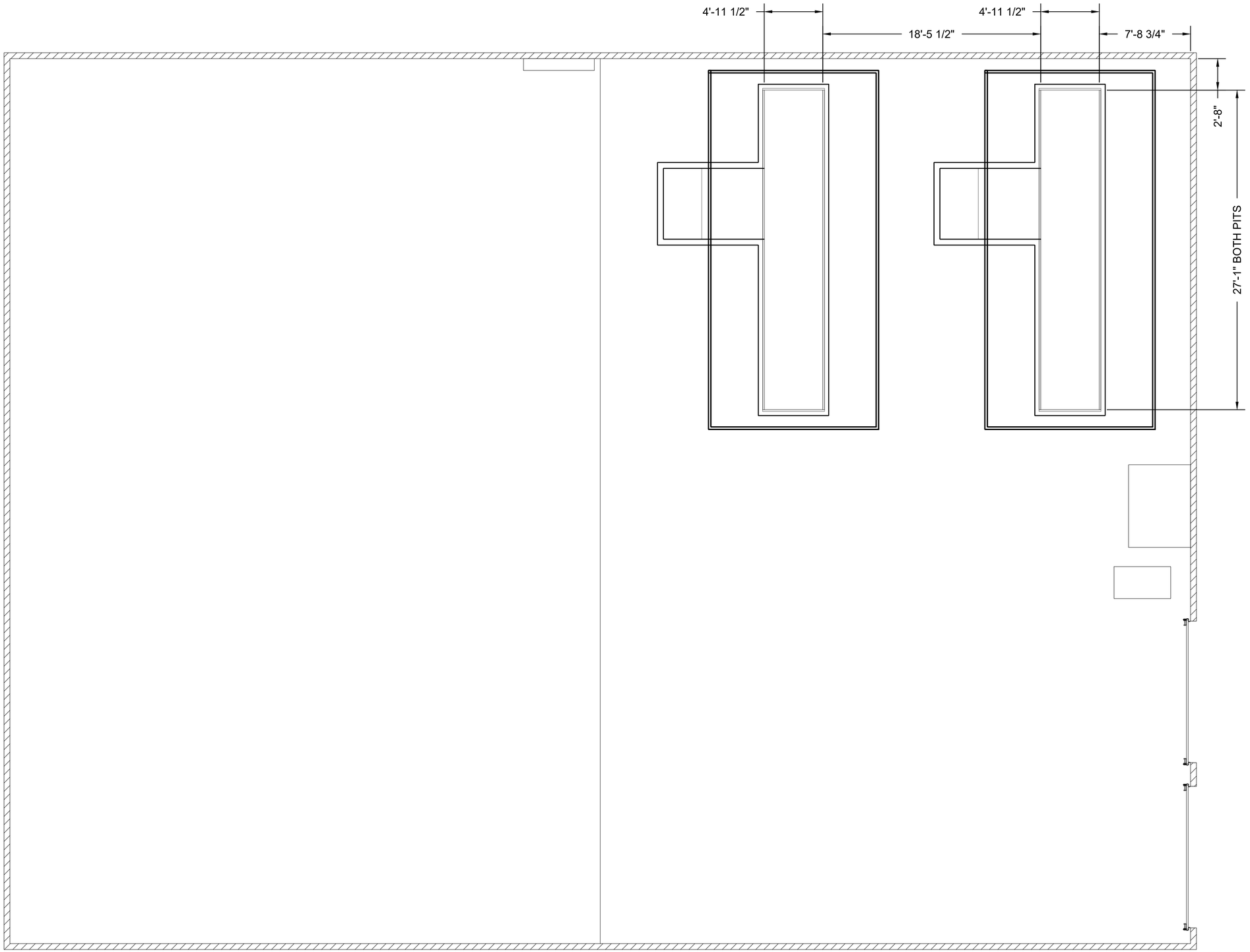

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CERTIFICATE OF AUTHORITY NO. 001498

AUTOMOTIVE TECHNOLOGY, INC.

544 MAE COURT
FENTON, MO 63026

STATE OF MISSOURI
DARRELL R. CASE
NUMBER PE-2330
PROFESSIONAL ENGINEER
03/04/22

CRASH CHAMPIONS -LEE SUMMIT

PAINT BOOTH

451 SE OLDHAM PKWY
LEE SUMMIT, MO 64081

REVISIONS

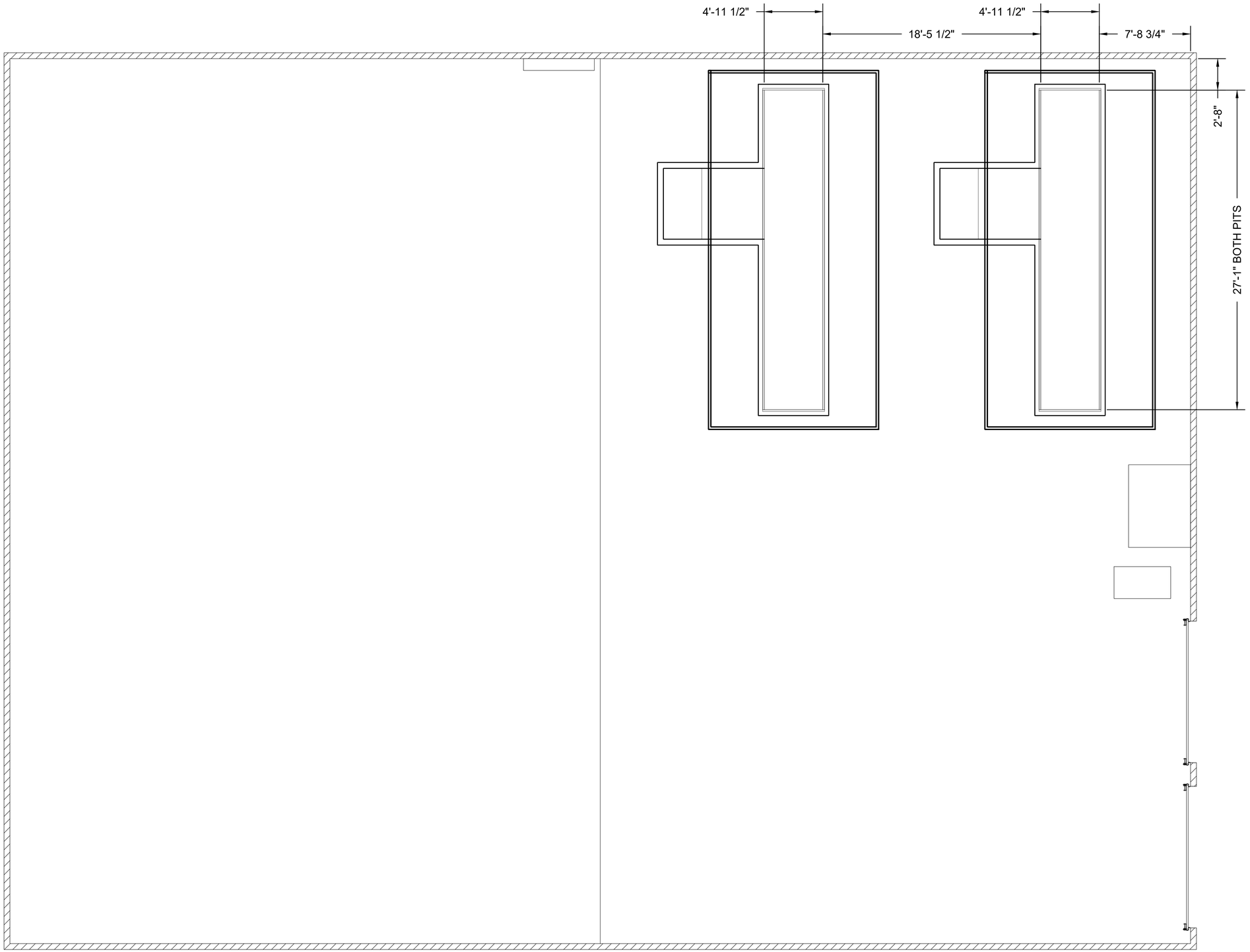
No.	Description	Date

PAINT BOOTH LOCATION

Project #	
Issue Date	
Drawn by	
Checked by	

M1

Scale



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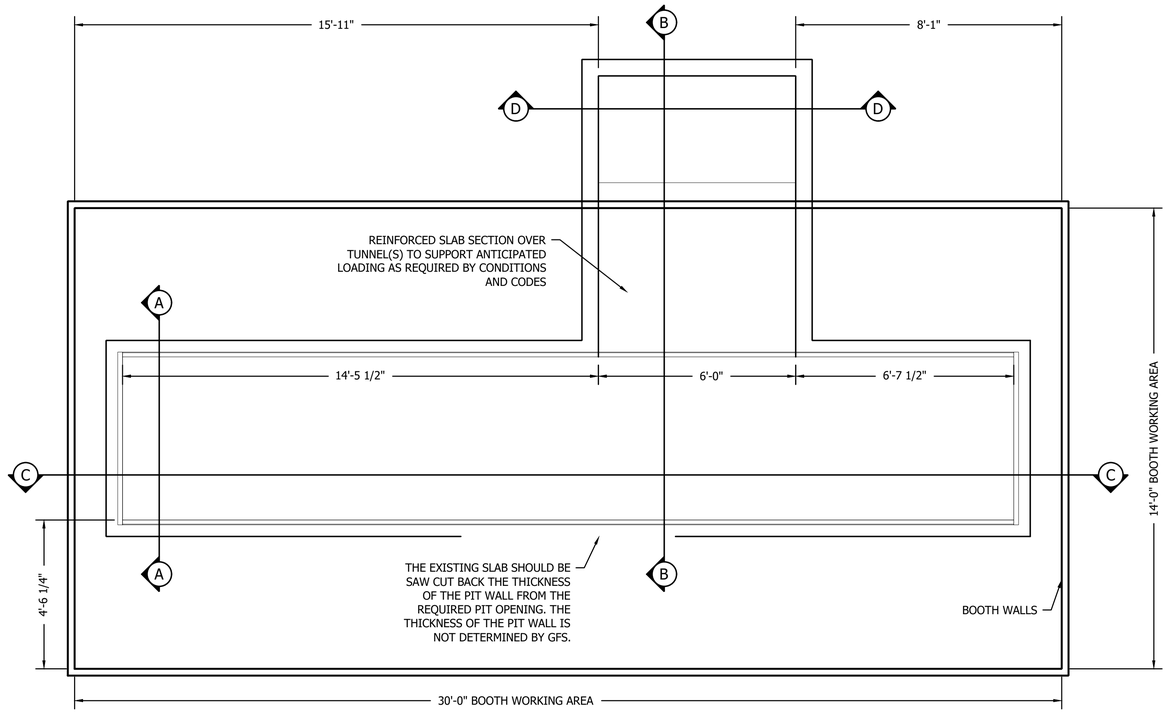
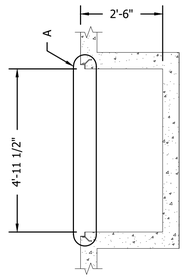


PLAN VIEW



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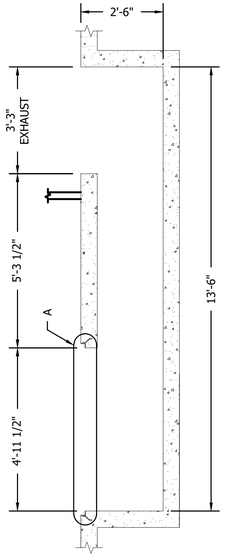

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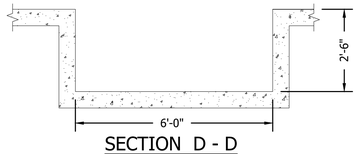

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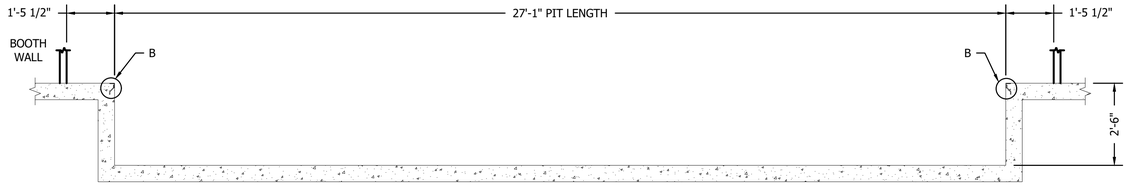

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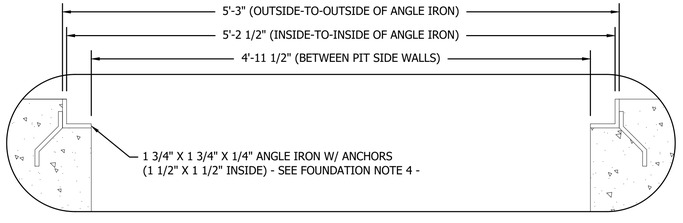
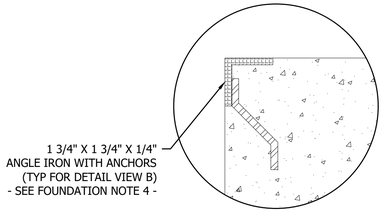


DETAIL A



DETAIL B

BAR GRATING SPECIFICATION	
BAR SIZE (in)	1 - ½ x 3/16
TYPE	LIGHT DUTY
MAX WHEEL LOAD (lbs)	1,850
W SERIES	19-W-4
* BASED ON A CONTACT LENGTH OF 9" (IE 11 BARS/FT OF GRATING WIDTH) AND A MAXIMUM CLEAR SPAN OF 2'-4 1/2"	

FOUNDATION NOTES

1. CONTRACTOR SHALL VERIFY THAT THERE ARE NO INTERFERENCES BETWEEN EXISTING FOUNDATION (FTG. PADS, CON. FTGS, GRADE BEAM, TIES, ETC) AND PROPOSED PIT FOUNDATION.
2. DO NOT PLACE BACKFILL AGAINST WALL UNTIL THE WALL HAS BEEN ADEQUATELY SHORED.
3. WALL LOCATIONS TO BE WITHIN 1/4" OF DIMENSIONS SHOWN.
4. ALL ANGLE IRON HAS BEEN SHOWN AS A REFERENCE, SHOULD BE IN THE SCOPE OF THE FOUNDATION DESIGN, AND PROVIDED BY OTHERS. ADJUSTMENTS MUST BE MADE FOR ANGLE THICKNESS THAT VARY FROM ¼" AS SHOWN IN DETAIL A.
5. THE DESIGN OF THE PIT GRATING AND ITS CAPACITY HAS BEEN PROVIDED IN A TABLE. DO NOT EXCEED THE WHEEL LOAD CAPACITY OF THE GRATING AS PROVIDED BY GFS. WHEELED VEHICLES WITH URETHANE TIRES SHOULD NEVER BE USED.
6. GRATINGS MUST BE INSTALLED WITH CROSS BARS ON TOP SIDE.
7. NOTCHING OF BEARING BARS AT SUPPORTS TO MAINTAIN PROPER ELEVATION IS GENERALLY NOT RECOMMENDED. IF NOTCHING IS REQUIRED FOR INSTALLATION, MANUFACTURER SHOULD BE CONSULTED.
8. METAL SHOULD ALWAYS BE USED FOR ALL GRATING SUPPORTS.
9. A MINIMUM OF 1" BEARING SHALL BE PROVIDED FOR ALUMINUM AND LIGHT DUTY STEEL GRATING. FOR HEAVY DUTY STEEL GRATING, 1" MINIMUM BEARING SHALL BE PROVIDED FOR BEARING BAR DEPTHS UP TO 2-1/4", AND 2" MINIMUM BEARING SHALL BE PROVIDED FOR DEPTHS OF 2-1/2" AND OVER. THIS BEARING SURFACE DOES NOT INCLUDE THE SUPPORT ANGLE FILLET RADIUS.
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11. DEPTH DIMENSIONS ARE BASED ON HAVING A 6" SLAB OVER THE EXHAUST TUNNEL. IF STRUCTURAL ANALYSIS INDICATES THAT A THICKER SLAB IS REQUIRED, PIT DEPTH SHOULD BE INCREASED ACCORDINGLY AND GFS NOTIFIED SO TALLER PIT RAILS CAN BE PROVIDED.

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AUTOMOTIVE TECHNOLOGY, INC.
544 MAE COURT
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STATE OF MISSOURI
DARRELL R. CASE
NUMBER PE-2330
PROFESSIONAL ENGINEER
03/04/22

CRASH CHAMPIONS -LEE SUMMIT
PAINT BOOTH
451 SE OLDHAM PKWY
LEE SUMMIT, MO 64081

REVISIONS

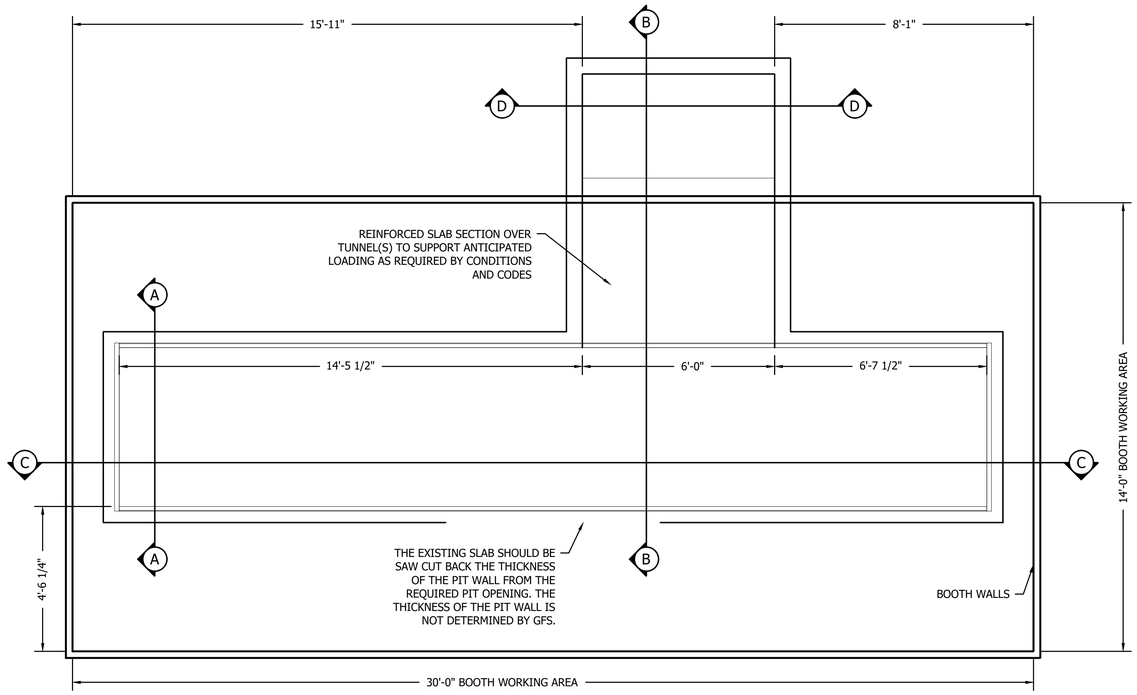
No.	Description	Date

PAINT BOOTH SPECIFICATIONS

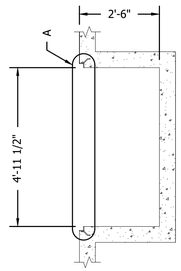
Project #	
Issue Date	
Drawn by	
Checked by	

M2

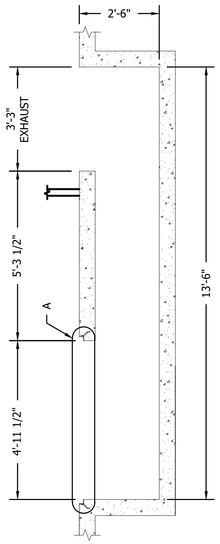
Scale



PLAN VIEW



SECTION A - A



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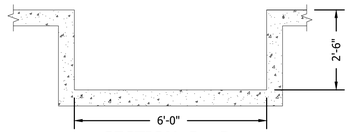

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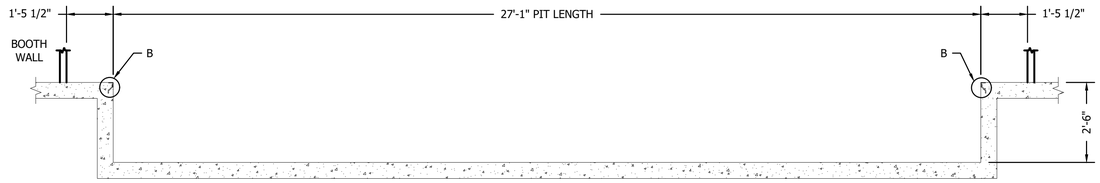

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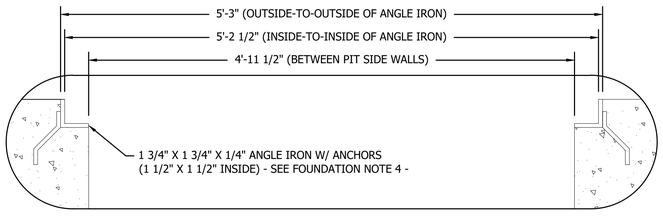
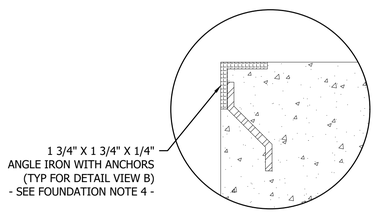


DETAIL A



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STATE OF MISSOURI
DARRELL R. CASE
NUMBER PE-23305
PROFESSIONAL ENGINEER
03/04/22

CRASH CHAMPIONS -LEE SUMMIT

PAINT BOOTH

451 SE OLDHAM PKWY
LEE SUMMIT, MO 64081

REVISIONS

No.	Description	Date

PAINT BOOTH SPECIFICATIONS

Project #	
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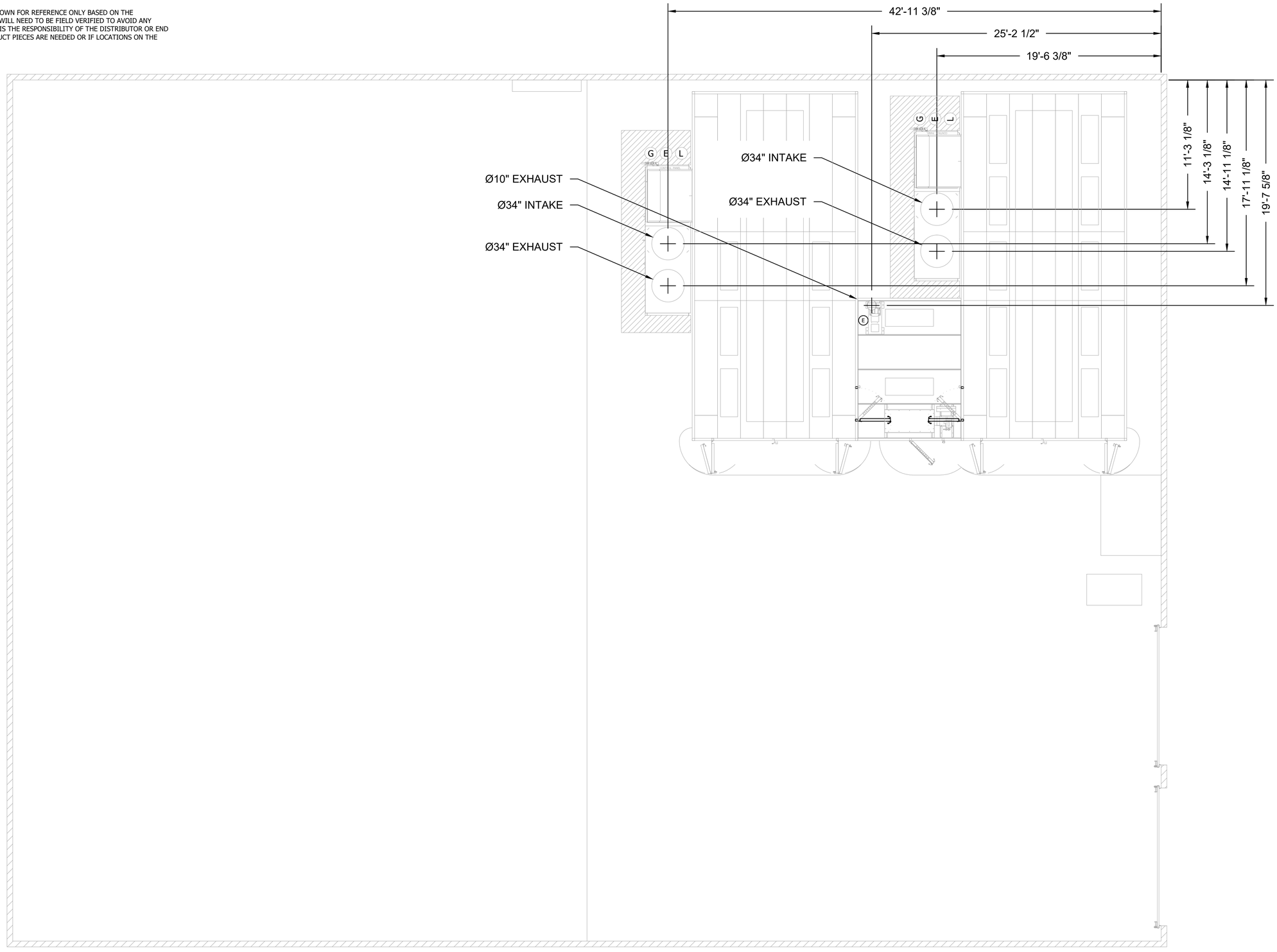
Drawn by	
Checked by	
M3	
Scale	

GFS EQUIPMENT CONSTRUCTION NOTE:

1. THE EQUIPMENT DEPICTED IN THIS DRAWING HAS NOT BEEN APPROVED FOR OUTDOOR APPLICATIONS. IN THE EVENT THAT SUCH APPLICATIONS AND/OR USES ARE CONTEMPLATED, THE PURCHASER OF THE EQUIPMENT IS RESPONSIBLE FOR NOTIFYING GFS SO THAT ADDITIONAL STRUCTURAL ANALYSIS CAN BE PERFORMED AND THE NECESSARY MODIFICATIONS CAN BE DETERMINED.

2. DUCT SUPPORT NOT SUPPLIED OR DESIGNED BY GFS. EQUIPMENT IS NOT DESIGNED TO SUPPORT DUCT. DUCT SUPPORTS SHALL BE DESIGNED TO RELIEVE THE EQUIPMENT OF ALL DUCT LOAD.

3. ROOF PENETRATION LOCATIONS ARE SHOWN FOR REFERENCE ONLY BASED ON THE INFORMATION PROVIDED. LOCATIONS WILL NEED TO BE FIELD VERIFIED TO AVOID ANY OVERHEAD OBSTACLES AS NEEDED. IT IS THE RESPONSIBILITY OF THE DISTRIBUTOR OR END USER TO NOTIFY GFS IF ADDITIONAL DUCT PIECES ARE NEEDED OR IF LOCATIONS ON THE DRAWING NEED TO BE ALTERED.



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451 SE OLDHAM PKWY
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Checked by	
M4	
Scale	

GFS EQUIPMENT CONSTRUCTION NOTE:

1. GAS SUPPLY REQUIRED (BY OTHERS) TO GAS CONNECTION POINT (G).
   MINIMUM GAS PRESSURE IS REQUIRED AT MAXIMUM VOLUME CONSUMED.
   MINIMUM CIRCUIT CAPACITY IS REQUIRED (BY OTHERS) TO CONNECTION POINT (E).
   LIGHTING CIRCUIT IS REQUIRED (BY OTHERS) TO CONNECTION POINT (L).

2. THE EQUIPMENT DEPICTED IN THIS DRAWING HAS NOT BEEN APPROVED FOR OUTDOOR APPLICATIONS. IN THE EVENT THAT SUCH APPLICATIONS AND/OR USES ARE CONTEMPLATED, THE PURCHASER OF THE EQUIPMENT IS RESPONSIBLE FOR NOTIFYING GFS SO THAT ADDITIONAL STRUCTURAL ANALYSIS CAN BE PERFORMED AND THE NECESSARY MODIFICATIONS CAN BE DETERMINED.

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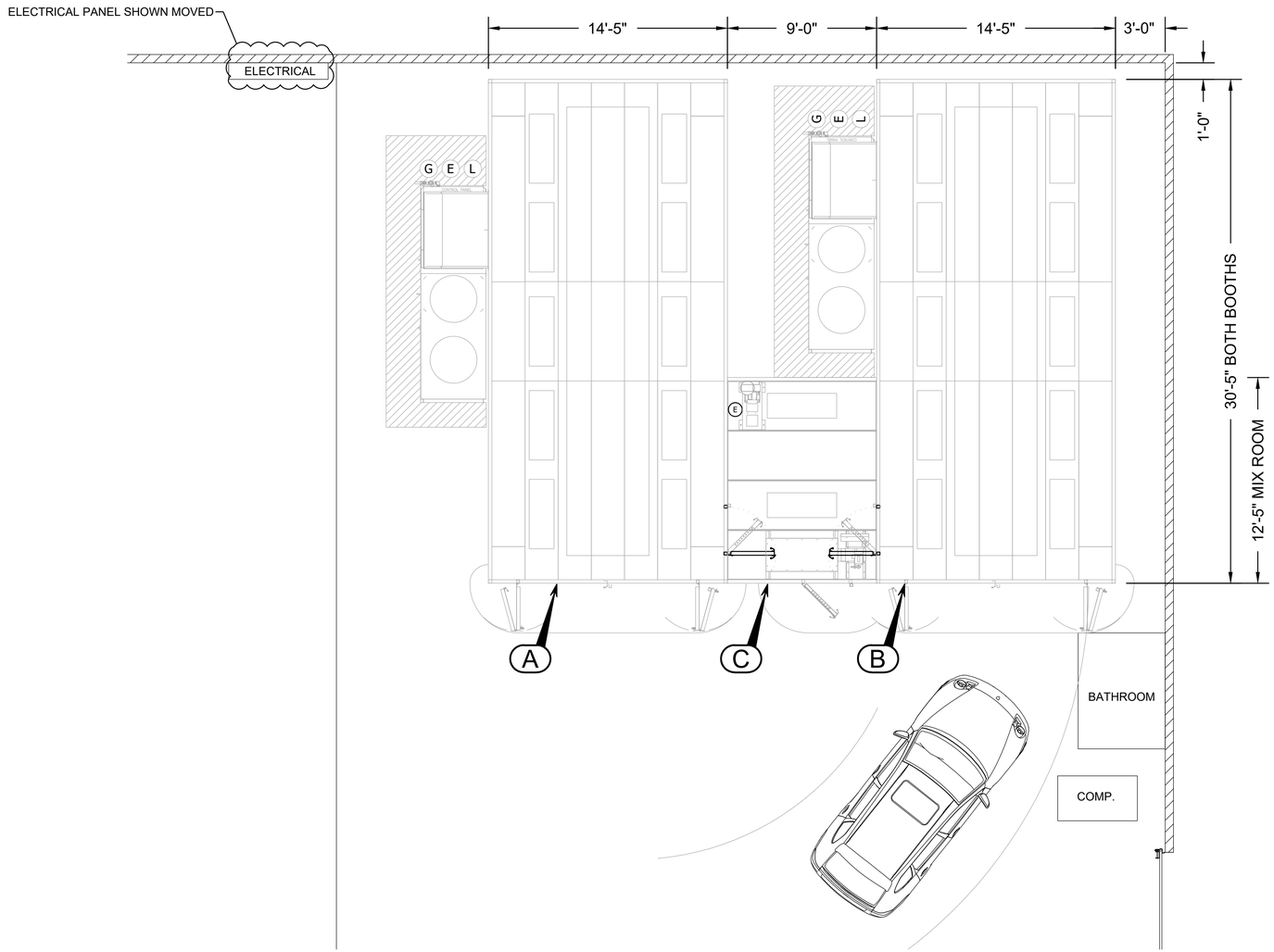

A ULTRA XL DOWNDRAFT BOOTH 30'L x 14'W x 12'H INSIDE	AIR HEATER								MOTOR MINIMUM CIRCUIT CAPACITY						LIGHTING CIRCUIT		
	MAX AIR FLOW RATE (CFM)	INTAKE / EXHAUST MOTOR (HP)	FUEL	MAX FIRING RATE (BTU/HR)	MIN INLET PRESS. AT MAX FIRING RATE (INWC)	MAX INLET PRESS. (PSI)	TEMP. RISE (°F)	INLET PIPE SIZE NPT (IN)	MOTOR SPECIFICATIONS	FULL LOAD AMP DRAW /MINIMUM CIRCUIT CAPACITY					QUANTITY OF LIGHT FIXTURES (4-TUBE, 6-TUBE, STD OR LED)	SINGLE PHASE MINIMUM CIRCUIT CAPACITY (AMPS)	
									15HP INTAKE, 15HP EXHAUST	230V 1PH	208V 3PH	230V 3PH	480V 3PH	575V 3PH		120V	277V
	15205	15 / 15	NATURAL GAS	1512605	13.0	5.0	91	1 1/4	NO ADVANCE CURE				44.0 / 55.0		16	30	20
			PROPANE	1323529	5.0		80										

B ULTRA XD DOWNDRAFT BOOTH 30'L x 14'W x 9'H INSIDE	AIR HEATER								MOTOR MINIMUM CIRCUIT CAPACITY						LIGHTING CIRCUIT		
	MAX AIR FLOW RATE (CFM)	INTAKE / EXHAUST MOTOR (HP)	FUEL	MAX FIRING RATE (BTU/HR)	MIN INLET PRESS. AT MAX FIRING RATE (INWC)	MAX INLET PRESS. (PSI)	TEMP. RISE (°F)	INLET PIPE SIZE NPT (IN)	MOTOR SPECIFICATIONS	FULL LOAD AMP DRAW /MINIMUM CIRCUIT CAPACITY					QUANTITY OF LIGHT FIXTURES (4-TUBE, 6-TUBE, STD OR LED)	SINGLE PHASE MINIMUM CIRCUIT CAPACITY (AMPS)	
									15HP INTAKE, 15HP EXHAUST	230V 1PH	208V 3PH	230V 3PH	480V 3PH	575V 3PH		120V	277V
	15205	15 / 15	NATURAL GAS	1512605	13.0	5.0	91	1 1/4	NO ADVANCE CURE				44.0 / 55.0		16	30	20
			PROPANE	1323529	5.0		80										

C ULTRA XD MIX ROOM 12'L x 9'W x 9'H INSIDE	ELECTRICAL REQUIREMENTS				
		ELECTRICAL DEVICE	MOTOR	FULL LOAD AMP DRAW	MINIMUM CIRCUIT CAPACITY
	EXHAUST FAN & INTAKE FAN	FAN MOTOR (EACH)	1/2HP, 120V, 1PH	9.8	30 AMP
		LIGHT FIXTURES	120V / 277V	1.0 / 0.5 (EACH)	

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CRASH CHAMPIONS -LEE SUMMIT

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M5

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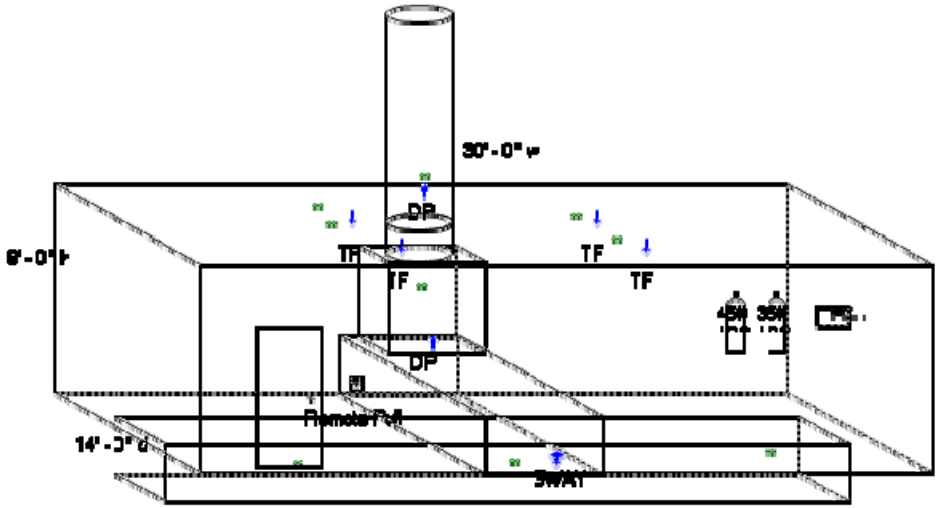
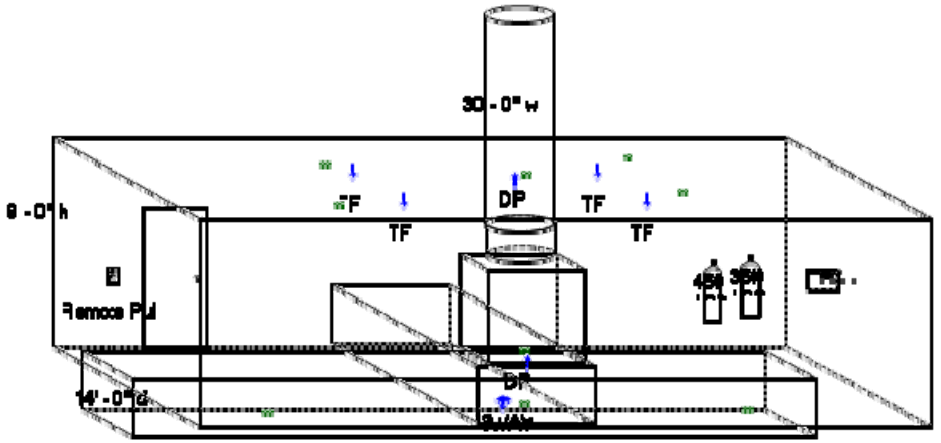
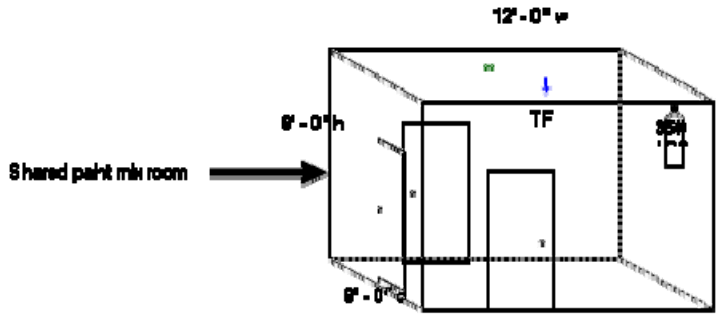
Amerex Pre-Engineered Fire Suppression System







SCALE

1 foot

	Designed & Installed by: Allstate Fire Company 1030 W 23rd Suite G Independence, MO 64055 816-463-2672	For: Crash Champions Lees Summit 451 SE Oldham Rd Lees Summit , MO 64081	Job: New Fire Sysetm Date: 6/23/2022

Stamp

Fire Suppression System Design Specifications

Notes

- A plastic cap which covers the nozzle tip to keep grease, dirt, or foreign material from plugging the orifice.
- The Industrial Dry Chemical Fire Suppression System has been installed in accordance with NFPA 17, NFPA 33, and the local I.M.C. Codes.
- The Industrial Dry Chemical Fire Suppression System has been evaluated by Underwriters Laboratories (UL) in accordance with the specific test protocol found in the UL1254 Standard (Pre-Engineered Dry Chemical System Units).
- All Electric work to be to be performed by the customer's Licensed Electrician.
- Exhaust Fan - VPSB required to shut down prior to discharge.
- Fire Suppression System to be tied into by the customer's Licensed Fire Alarm Company.
- Fittings are Schedule 40, 150# BMI.
- This Fire Suppression System has been designed so the customer can add additional coverage, if needed, in the future.
- Pipe is Schedule 40, 1" (black, chrome or stainless steel) pipe.
- Pipe is Schedule 40, 3/4" (black, chrome or stainless steel) pipe.

System Materials

Item Number	Description	Flow	Qty
16172	Total Flood (TF)	9.0	9
16174	Three-Way (3WAY)	2.0	2
16190	Duct and Plenum (DP)	4.0	4
16208	AGENT CYLINDER ASY â€“ IS45ABC		2
16207	AGENT CYLINDER ASY â€“ IS35ABC		3
16225	JOB LINK QUICK RESPONSE (200 F / 93 C)		14
12328	FUSIBLE LINK (360 F / 182 C)		2
16226	JOB LINK QUICK RESPONSE (286 F / 141 C)		2
12326	FUSIBLE LINK (212 F / 100 C)		1
18001	MRM - Mechanical Release Module		2
11993	Manual Pull Station - English - Rectangular		2
12856	Nitrogen Cylinder - 10 in(3)		2
10147	Pneumatic Control Head		5
12508	Detector Bracket Assembly - Includes Bracket, Linkage & Con		18
16235	Compression Seal - 3/4" EMT		12
22279	Quick Seal Corner Pulley Adapter - Fits CP5		12
18252	Quick Seal - 1" Pipe		2
16386	Alarm Bell 6" 115 VAC		1
15765	Mechanical Time Delay		2

Total Flow Points: 15.0

Designed & Installed by:
Allstate Fire Company
1030 W 23rd Suite G
Independence, MO 64055

For:
Crash Champions Lees Summit
451 SE Oldham Rd
Lees Summit , MO 64081

Fire Suppression System Design Specifications

Notes

- Piping Requirements: Piping diagrams include limitations on pipe length and fittings. System piping must be balanced. Balanced piping is that in which the difference between the shortest actual pipe length from the 1" tee to the nozzle and the longest actual pipe length from the 1" tee to the nozzle does not exceed 10% of the actual pipe length from tee to nozzle. The number and type of fittings for both tee to nozzle sections must be equal.

- Remote pull station shall be 48" above finished floor and in the path of egress.

- System shall have manual and automatic methods of actuation.

- Upon activation of system all electrical & fuel must shut down.

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For:
Crash Champions Lees Summit
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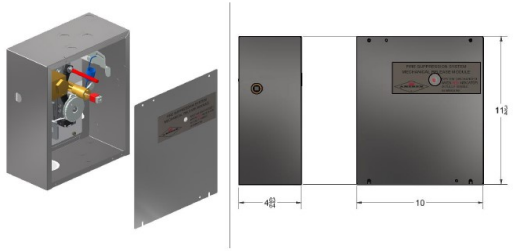
Amerex Fire Suppression System Specifications

MECHANICAL RELEASE MODULE



P/N: 18001

The new MRM combines the same features and functionality as the original MRM along with increased detection capabilities and far simpler means of setting the detection cable tension. The slide plate and collapsible column are now Teflon coated. The MRM is available in the above configurations, now preinstalled in its own enclosure.

Setting the detection cable tension does not require the use of any tools (once the cable is locked down into the large, knurled ratchet wheel). A large lever to the right of the ratchet wheel is used to increase the cable tension. Alignment of the bottom edge of the lever with markings on a label indicates when the proper tension has been achieved. Lowering cable tension to change out detection links is now also much simpler.

There is also a MRM available without the enclosure, P/N 11977. This has the same purpose and functionality as the MRM (P/N 18001). It is often used in conjunction with the Single

NITROGEN ACTUATION CYLINDERS

Part No.	12856 (10 in³)	
Diameter	1.998 in	5.07 cm
Length	6 3/8 in	16.19 cm
Part No.	09956 (15 in³)	
Diameter	1.998 in	5.07 cm
Length	9 11/25 in	24 cm

Typical Pressure	12856 / 09956	
@ 40F	~1700 PSI	~11722 kPa
@ 70F	1800 PSI	12411 kPa
@ 100F	~1900 PSI	~12893 kPa

P/N: 12856 / 09956

The N2 Actuation Cylinder supplies nitrogen gas pressure to the Agent Cylinder Discharge Valve through the actuation network for the purpose of opening the Agent Cylinder. Each Actuation Cylinder is charged to 1800 psig (12410 KPa) at 70°F (21°C)

The 10 in³ N_2 Actuation Cylinder (P/N 12856) contains enough nitrogen to actuate up to ten total of Models 275 / 375 / 475 Agent Cylinders Assemblies in any combination. A total of six Model 600 Agent Cylinders Assemblies OR a total of six Agent Cylinders when the mix contains at least one Model 600 Agent Cylinder Assemblies.

The 15 in³ N2 Actuation Cylinder (P/N 09956) contains enough nitrogen to actuate up to ten total of Models 275 / 375 / 475 & 600 Agent Cylinders Assemblies in any combination.

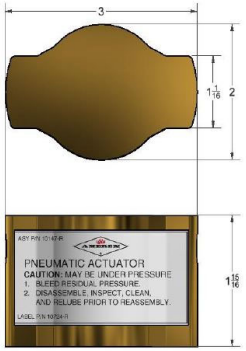
A Replacement Rupture Disc (P/N 09958) is available for both cylinders for use by certified

FUSIBLE / JOB LINK DETECTOR BRACKET

P/N: 12508

Each Detector Bracket in the AMEREX KP System is comprised of three parts the Detector Bracket, Detector Linkage and two EMT fittings. The fusible link is ordered separately. The bracket serves as support for the linkage and is attached to a rigid surface. The linkage supports the fusible link and a continuous cable run under tension. At a predetermined temperature the fusible link will separate, relieving tension on the cable and actuating the

KP600 PNEUMATIC ACTUATOR



P/N: 10147

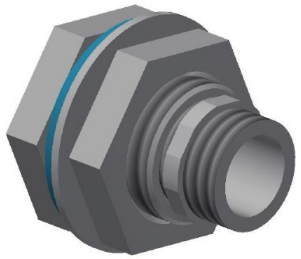
The Pneumatic Actuator is required for every pneumatically actuated. KP600 Agent Cylinder Assembly. The actuator is bolted directly to the top of the agent cylinder discharge valve. When actuation occurs at the MRM or PRM, the pneumatic pressure from the nitrogen cylinder enters the actuator through ¼" NPT threaded ports on either side. The actuation pressure forces the piston inside to extend and depress the valve stem of the discharge valve. Resetting is easier than the previous discontinued

Designed & Installed by:
Allstate Fire Company
1030 W 23rd Suite G
Independence, MO 64055

For:
Crash Champions Lees Summit
451 SE Oldham Rd
Lees Summit , MO 64081

Amerex Fire Suppression System Specifications

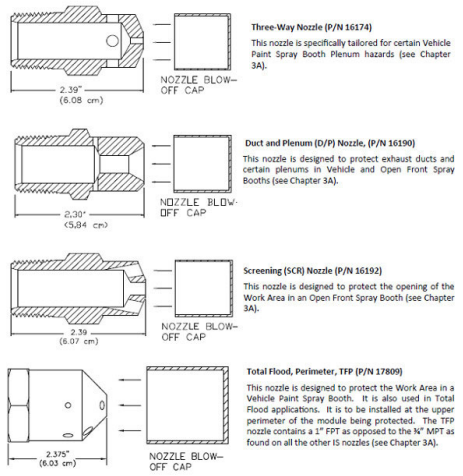
QUICK SEAL CORNER PULLY ADAPTER



P/N 22279 - EMT THREAD - HOLE SIZE 1-1/8" DIA.

This listed mechanical bulkhead fitting provides a close connection to a CP5 corner pulley. The close coupling of the two assist in alignment of the conduit run to a detection bracket.

IS DISCHARGE NOZZLES



Three-Way Nozzle (P/N 16174)

This nozzle is specifically tailored for certain Vehicle Paint Spray Booth Plenum hazards (see Chapter 3A).

Duct and Plenum (D/P) Nozzle, (P/N 16190)

This nozzle is designed to protect exhaust ducts and certain plenums in Vehicle and Open Front Spray Booths (see Chapter 3A).

Screening (SCR) Nozzle (P/N 16192)

This nozzle is designed to protect the opening of the Work Area in an Open Front Spray Booth (see Chapter 3A).

Total Flood, Perimeter, TFP (P/N 17809)

This nozzle is designed to protect the Work Area in a Vehicle Paint Spray Booth. It is also used in Total Flood applications. It is to be installed at the upper perimeter of the module being protected. The TFP nozzle contains a 1" FPT as opposed to the ¾" MPT as found on all the other IS nozzles (see Chapter 3A).

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Fire Suppression System Design Specifications

Notes

- A plastic cap which covers the nozzle tip to keep grease, dirt, or foreign material from plugging the orifice.
- The Industrial Dry Chemical Fire Suppression System has been installed in accordance with NFPA 17, NFPA 33, and the local I.M.C. Codes.
- The Industrial Dry Chemical Fire Suppression System has been evaluated by Underwriters Laboratories (UL) in accordance with the specific test protocol found in the UL1254 Standard (Pre-Engineered Dry Chemical System Units).
- All Electric work to be to be performed by the customer's Licensed Electrician.
- Exhaust Fan - VPSB required to shut down prior to discharge.
- Fire Suppression System to be tied into by the customer's Licensed Fire Alarm Company.
- Fittings are Schedule 40, 150# BMI.
- This Fire Suppression System has been designed so the customer can add additional coverage, if needed, in the future.
- Pipe is Schedule 40, 1" (black, chrome or stainless steel) pipe.
- Pipe is Schedule 40, 3/4" (black, chrome or stainless steel) pipe.
- Piping Requirements: Piping diagrams include limitations on pipe length and fittings. System piping must be balanced. Balanced piping is that in which the difference between the shortest actual pipe length from the 1" tee to the nozzle and the longest actual pipe length from the 1" tee to the nozzle does not exceed 10% of the actual pipe length from tee to nozzle. The number and type of fittings for both tee to nozzle sections must be equal.
- Remote pull station shall be 48" above finished floor and in the path of egress.
- System shall have manual and automatic methods of actuation.
- Upon activation of system all electrical & fuel must shut down.

System Materials

Item Number	Description	Flow	Qty
16172	Total Flood (TF)	9.0	9
16174	Three-Way (3WAY)	2.0	2
16190	Duct and Plenum (DP)	4.0	4
16208	AGENT CYLINDER ASY â€“ IS45AB		2
16207	AGENT CYLINDER ASY â€“ IS35AB		3
16225	JOB LINK QUICK RESPONSE (200		14
12328	FUSIBLE LINK (360 F / 182 C)		2
16226	JOB LINK QUICK RESPONSE (286		2
12326	FUSIBLE LINK (212 F / 100 C)		1
18001	MRM - Mechanical Release Module		2
11993	Manual Pull Station - English - Recta		2
12856	Nitrogen Cylinder - 10 in(3)		2
10147	Pneumatic Control Head		5
12508	Detector Bracket Assembly - Includes		18
16235	Compression Seal - 3/4" EMT		12
22279	Quick Seal Corner Pulley Adapter - Fi		12
18252	Quick Seal - 1" Pipe		2
16386	Alarm Bell 6" 115 VAC		1
15765	Mechanical Time Delay		2

Total Flow Points: 15.0

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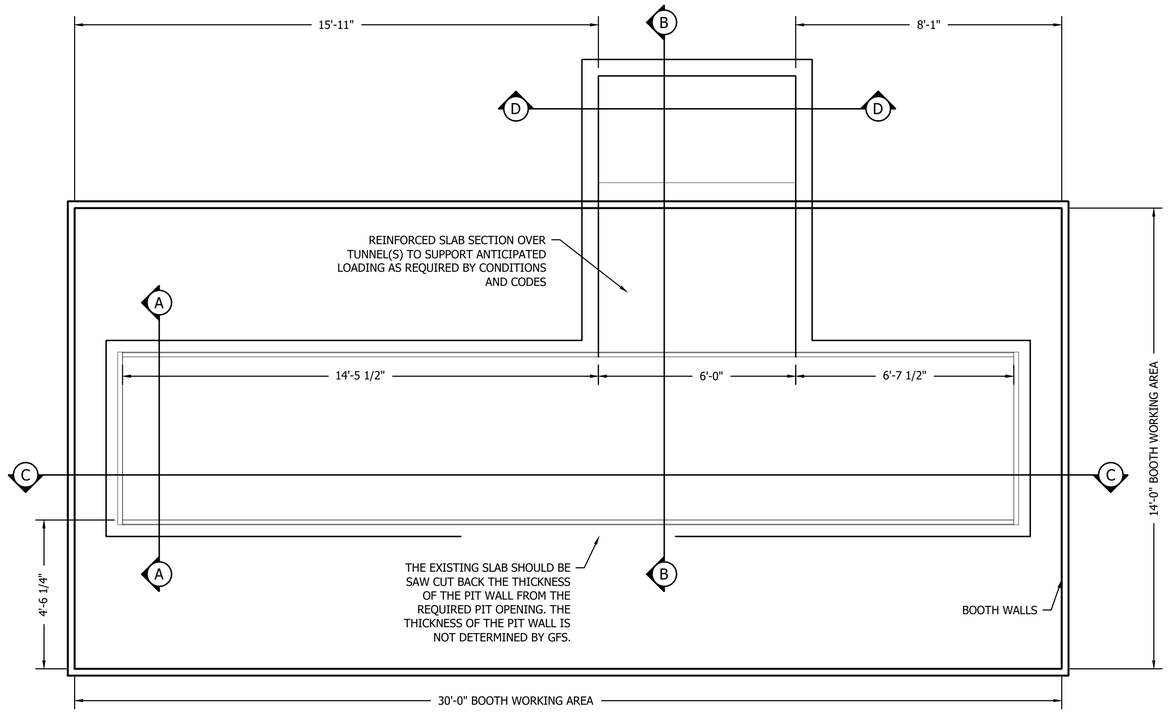
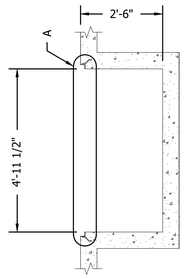
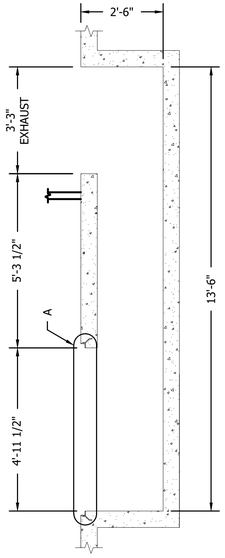


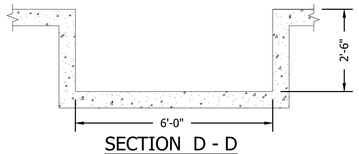
PLAN VIEW



SECTION A - A



SECTION B - B



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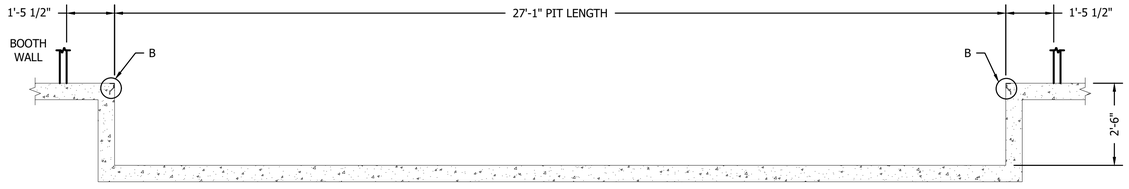

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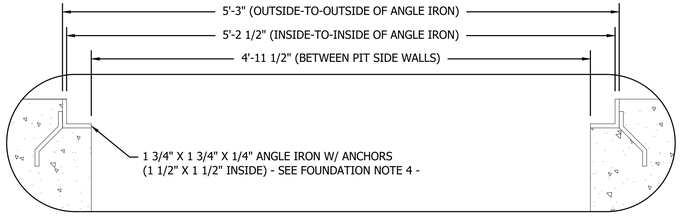
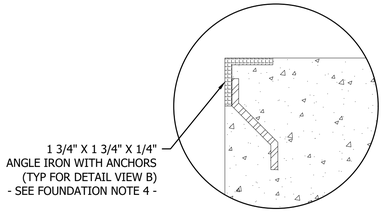


DETAIL A



DETAIL B

BAR GRATING SPECIFICATION	
BAR SIZE (in)	1 - ½ x 3/16
TYPE	LIGHT DUTY
MAX WHEEL LOAD (lbs)	1,850
W SERIES	19-W-4
* BASED ON A CONTACT LENGTH OF 9" (IE 11 BARS/FT OF GRATING WIDTH) AND A MAXIMUM CLEAR SPAN OF 2'-4 1/2"	

FOUNDATION NOTES

1. CONTRACTOR SHALL VERIFY THAT THERE ARE NO INTERFERENCES BETWEEN EXISTING FOUNDATION (FTG. PADS, CON. FTGS, GRADE BEAM, TIES, ETC) AND PROPOSED PIT FOUNDATION.
2. DO NOT PLACE BACKFILL AGAINST WALL UNTIL THE WALL HAS BEEN ADEQUATELY SHORED.
3. WALL LOCATIONS TO BE WITHIN 1/4" OF DIMENSIONS SHOWN.
4. ALL ANGLE IRON HAS BEEN SHOWN AS A REFERENCE, SHOULD BE IN THE SCOPE OF THE FOUNDATION DESIGN, AND PROVIDED BY OTHERS. ADJUSTMENTS MUST BE MADE FOR ANGLE THICKNESS THAT VARY FROM ¼" AS SHOWN IN DETAIL A.
5. THE DESIGN OF THE PIT GRATING AND ITS CAPACITY HAS BEEN PROVIDED IN A TABLE. DO NOT EXCEED THE WHEEL LOAD CAPACITY OF THE GRATING AS PROVIDED BY GFS. WHEELED VEHICLES WITH URETHANE TIRES SHOULD NEVER BE USED.
6. GRATINGS MUST BE INSTALLED WITH CROSS BARS ON TOP SIDE.
7. NOTCHING OF BEARING BARS AT SUPPORTS TO MAINTAIN PROPER ELEVATION IS GENERALLY NOT RECOMMENDED. IF NOTCHING IS REQUIRED FOR INSTALLATION, MANUFACTURER SHOULD BE CONSULTED.
8. METAL SHOULD ALWAYS BE USED FOR ALL GRATING SUPPORTS.
9. A MINIMUM OF 1" BEARING SHALL BE PROVIDED FOR ALUMINUM AND LIGHT DUTY STEEL GRATING. FOR HEAVY DUTY STEEL GRATING, 1" MINIMUM BEARING SHALL BE PROVIDED FOR BEARING BAR DEPTHS UP TO 2-1/4", AND 2" MINIMUM BEARING SHALL BE PROVIDED FOR DEPTHS OF 2-1/2" AND OVER. THIS BEARING SURFACE DOES NOT INCLUDE THE SUPPORT ANGLE FILLET RADIUS.
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CASE Engineering Inc.
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CERTIFICATE OF AUTHORITY NO. 001498

AUTOMOTIVE TECHNOLOGY, INC.
544 MAE COURT
FENTON, MO 63026

STATE OF MISSOURI
DARRELL R. CASE
NUMBER PE-2330
PROFESSIONAL ENGINEER
03/04/22

CRASH CHAMPIONS -LEE SUMMIT
PAINT BOOTH
451 SE OLDHAM PKWY
LEE SUMMIT, MO 64081

REVISIONS

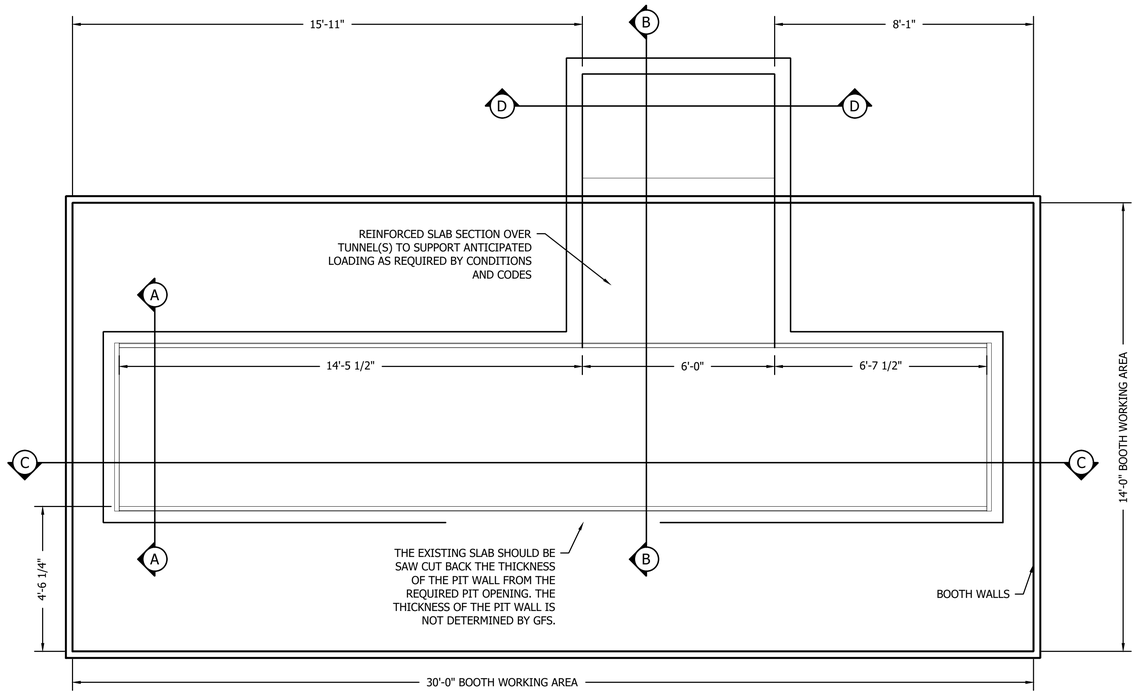
No.	Description	Date

PAINT BOOTH SPECIFICATIONS

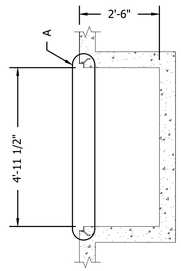
Project #	
Issue Date	
Drawn by	
Checked by	

M2

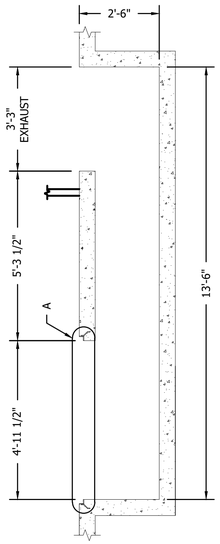
Scale



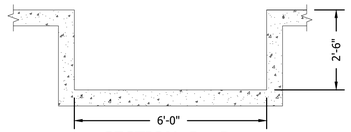
PLAN VIEW



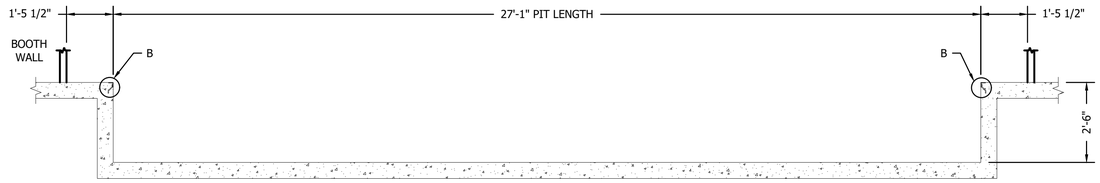
SECTION A - A



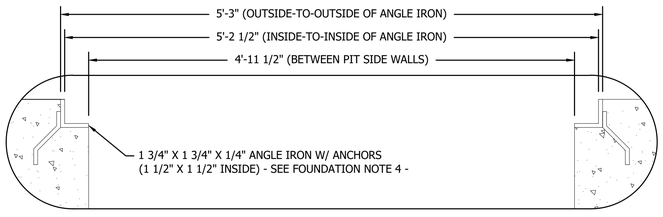
SECTION B - B



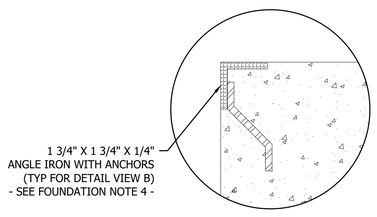
SECTION D - D



SECTION C - C



DETAIL A



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03/04/22

CRASH CHAMPIONS -LEE SUMMIT

PAINT BOOTH

451 SE OLDHAM PKWY
LEE SUMMIT, MO 64081

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PAINT BOOTH SPECIFICATIONS

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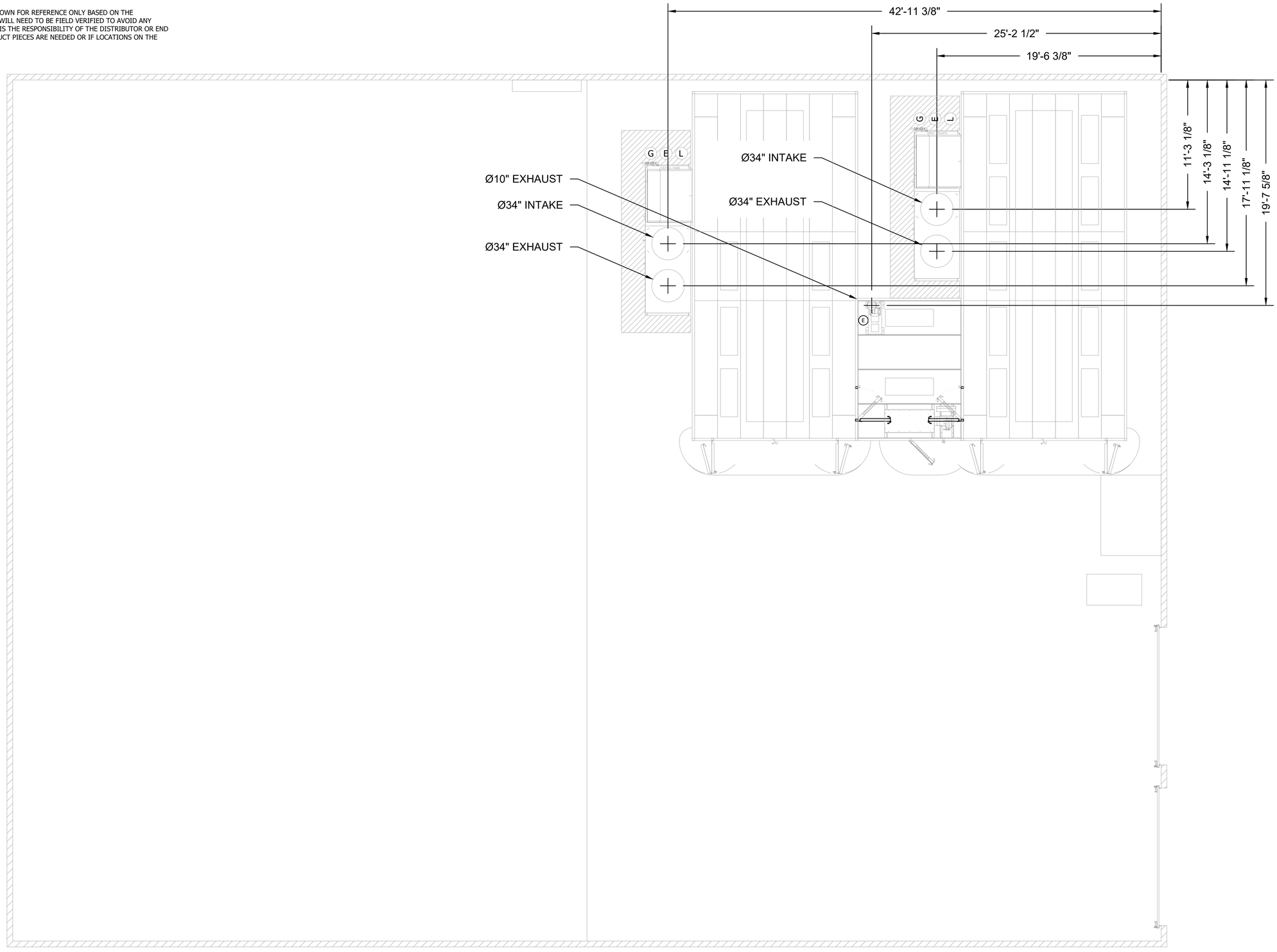
Drawn by	
Checked by	
M3	
Scale	

GFS EQUIPMENT CONSTRUCTION NOTE:

1. THE EQUIPMENT DEPICTED IN THIS DRAWING HAS NOT BEEN APPROVED FOR OUTDOOR APPLICATIONS. IN THE EVENT THAT SUCH APPLICATIONS AND/OR USES ARE CONTEMPLATED, THE PURCHASER OF THE EQUIPMENT IS RESPONSIBLE FOR NOTIFYING GFS SO THAT ADDITIONAL STRUCTURAL ANALYSIS CAN BE PERFORMED AND THE NECESSARY MODIFICATIONS CAN BE DETERMINED.

2. DUCT SUPPORT NOT SUPPLIED OR DESIGNED BY GFS. EQUIPMENT IS NOT DESIGNED TO SUPPORT DUCT. DUCT SUPPORTS SHALL BE DESIGNED TO RELIEVE THE EQUIPMENT OF ALL DUCT LOAD.

3. ROOF PENETRATION LOCATIONS ARE SHOWN FOR REFERENCE ONLY BASED ON THE INFORMATION PROVIDED. LOCATIONS WILL NEED TO BE FIELD VERIFIED TO AVOID ANY OVERHEAD OBSTACLES AS NEEDED. IT IS THE RESPONSIBILITY OF THE DISTRIBUTOR OR END USER TO NOTIFY GFS IF ADDITIONAL DUCT PIECES ARE NEEDED OR IF LOCATIONS ON THE DRAWING NEED TO BE ALTERED.



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Checked by	
M4	
Scale	

GFS EQUIPMENT CONSTRUCTION NOTE:

1. GAS SUPPLY REQUIRED (BY OTHERS) TO GAS CONNECTION POINT (G).
   MINIMUM GAS PRESSURE IS REQUIRED AT MAXIMUM VOLUME CONSUMED.
   MINIMUM CIRCUIT CAPACITY IS REQUIRED (BY OTHERS) TO CONNECTION POINT (E).
   LIGHTING CIRCUIT IS REQUIRED (BY OTHERS) TO CONNECTION POINT (L).

2. THE EQUIPMENT DEPICTED IN THIS DRAWING HAS NOT BEEN APPROVED FOR OUTDOOR APPLICATIONS. IN THE EVENT THAT SUCH APPLICATIONS AND/OR USES ARE CONTEMPLATED, THE PURCHASER OF THE EQUIPMENT IS RESPONSIBLE FOR NOTIFYING GFS SO THAT ADDITIONAL STRUCTURAL ANALYSIS CAN BE PERFORMED AND THE NECESSARY MODIFICATIONS CAN BE DETERMINED.

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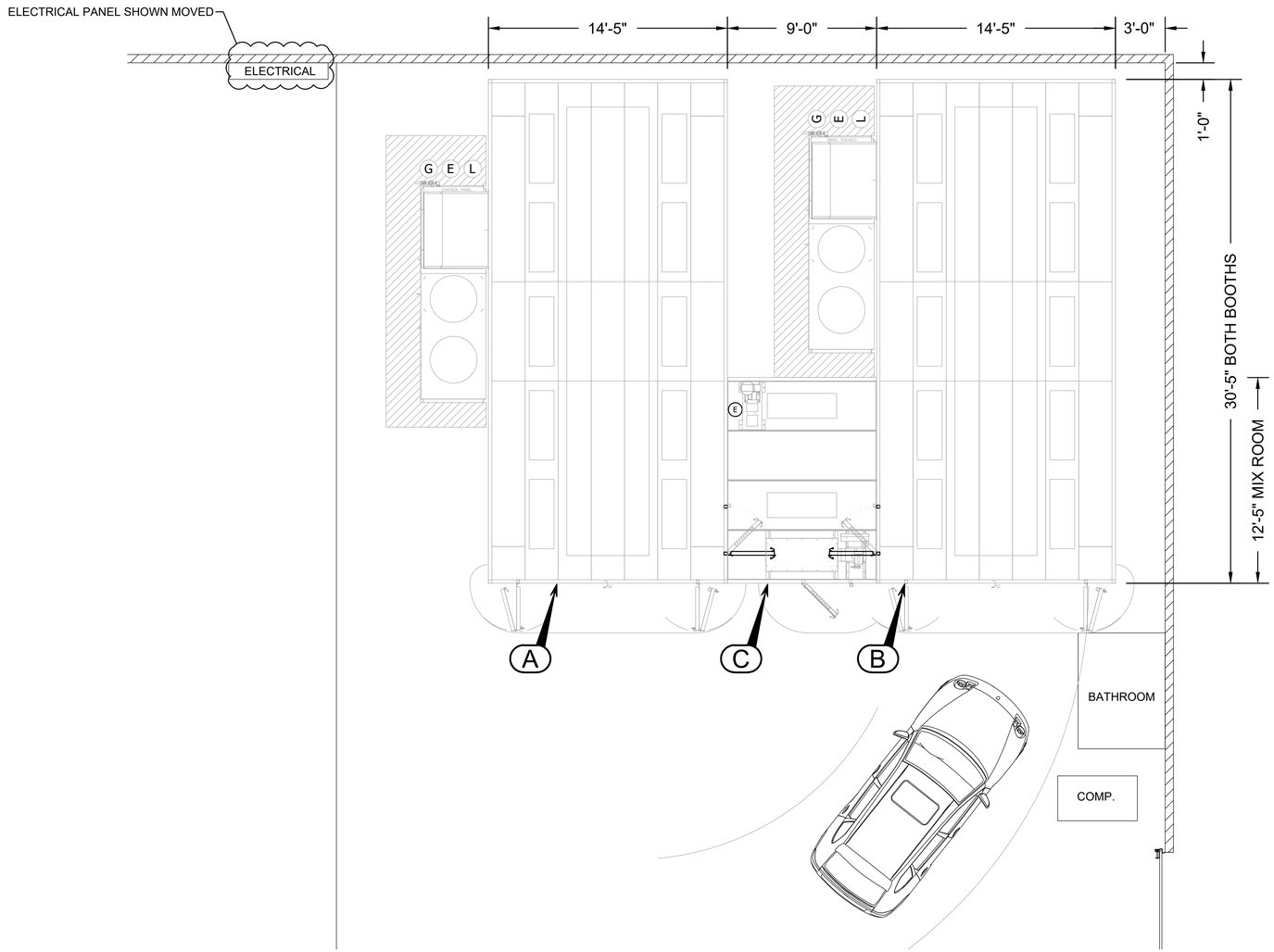

A ULTRA XL DOWNDRAFT BOOTH 30'L x 14'W x 12'H INSIDE	AIR HEATER								MOTOR MINIMUM CIRCUIT CAPACITY						LIGHTING CIRCUIT		
	MAX AIR FLOW RATE (CFM)	INTAKE / EXHAUST MOTOR (HP)	FUEL	MAX FIRING RATE (BTU/HR)	MIN INLET PRESS. AT MAX FIRING RATE (INWC)	MAX INLET PRESS. (PSI)	TEMP. RISE (°F)	INLET PIPE SIZE NPT (IN)	MOTOR SPECIFICATIONS	FULL LOAD AMP DRAW /MINIMUM CIRCUIT CAPACITY					QUANTITY OF LIGHT FIXTURES (4-TUBE, 6-TUBE, STD OR LED)	SINGLE PHASE MINIMUM CIRCUIT CAPACITY (AMPS)	
									15HP INTAKE, 15HP EXHAUST	230V 1PH	208V 3PH	230V 3PH	480V 3PH	575V 3PH		120V	277V
	15205	15 / 15	NATURAL GAS	1512605	13.0	5.0	91	1 1/4	NO ADVANCE CURE				44.0 / 55.0		16	30	20
			PROPANE	1323529	5.0		80										

B ULTRA XD DOWNDRAFT BOOTH 30'L x 14'W x 9'H INSIDE	AIR HEATER								MOTOR MINIMUM CIRCUIT CAPACITY						LIGHTING CIRCUIT		
	MAX AIR FLOW RATE (CFM)	INTAKE / EXHAUST MOTOR (HP)	FUEL	MAX FIRING RATE (BTU/HR)	MIN INLET PRESS. AT MAX FIRING RATE (INWC)	MAX INLET PRESS. (PSI)	TEMP. RISE (°F)	INLET PIPE SIZE NPT (IN)	MOTOR SPECIFICATIONS	FULL LOAD AMP DRAW /MINIMUM CIRCUIT CAPACITY					QUANTITY OF LIGHT FIXTURES (4-TUBE, 6-TUBE, STD OR LED)	SINGLE PHASE MINIMUM CIRCUIT CAPACITY (AMPS)	
									15HP INTAKE, 15HP EXHAUST	230V 1PH	208V 3PH	230V 3PH	480V 3PH	575V 3PH		120V	277V
	15205	15 / 15	NATURAL GAS	1512605	13.0	5.0	91	1 1/4	NO ADVANCE CURE				44.0 / 55.0		16	30	20
			PROPANE	1323529	5.0		80										

C ULTRA XD MIX ROOM 12'L x 9'W x 9'H INSIDE	ELECTRICAL REQUIREMENTS				
		ELECTRICAL DEVICE	MOTOR	FULL LOAD AMP DRAW	MINIMUM CIRCUIT CAPACITY
	EXHAUST FAN & INTAKE FAN	FAN MOTOR (EACH)	1/2HP, 120V, 1PH	9.8	30 AMP
		LIGHT FIXTURES	120V / 277V	1.0 / 0.5 (EACH)	

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796 Manz Court
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T 636.349.1600
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CERTIFICATE OF AUTHORITY NO. 001498

AUTOMOTIVE TECHNOLOGY, INC.

544 MAE COURT
FENTON, MO 63026

STATE OF MISSOURI
DARRELL R. CASE
NUMBER PE-23305
PROFESSIONAL ENGINEER
03/04/22

CRASH CHAMPIONS -LEE SUMMIT

PAINT BOOTH

451 SE OLDHAM PKWY
LEE SUMMIT, MO 64081

REVISIONS

No.	Description	Date

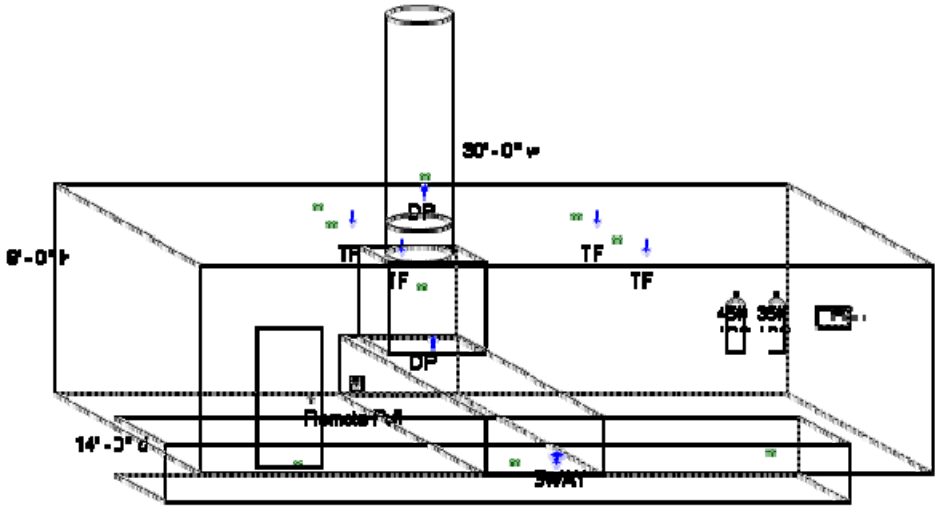
PAINT BOOTH SPECIFICATIONS

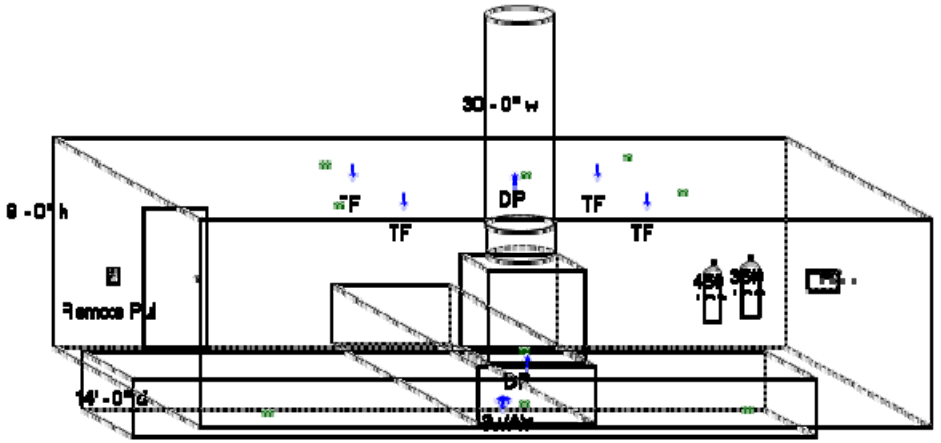
Project #
Issue Date
Drawn by
Checked by

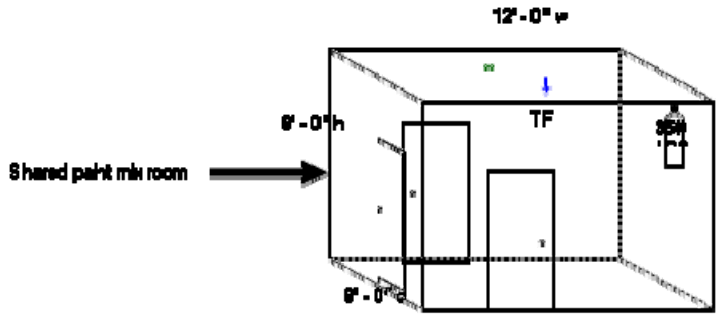
M5

Scale

Amerex Pre-Engineered Fire Suppression System







SCALE

1 foot

	Designed & Installed by: Allstate Fire Company 1030 W 23rd Suite G Independence, MO 64055 816-463-2672	For: Crash Champions Lees Summit 451 SE Oldham Rd Lees Summit , MO 64081	Job: New Fire Sysetm Date: 6/23/2022

Stamp

Fire Suppression System Design Specifications

Notes

- A plastic cap which covers the nozzle tip to keep grease, dirt, or foreign material from plugging the orifice.
- The Industrial Dry Chemical Fire Suppression System has been installed in accordance with NFPA 17, NFPA 33, and the local I.M.C. Codes.
- The Industrial Dry Chemical Fire Suppression System has been evaluated by Underwriters Laboratories (UL) in accordance with the specific test protocol found in the UL1254 Standard (Pre-Engineered Dry Chemical System Units).
- All Electric work to be to be performed by the customer's Licensed Electrician.
- Exhaust Fan - VPSB required to shut down prior to discharge.
- Fire Suppression System to be tied into by the customer's Licensed Fire Alarm Company.
- Fittings are Schedule 40, 150# BMI.
- This Fire Suppression System has been designed so the customer can add additional coverage, if needed, in the future.
- Pipe is Schedule 40, 1" (black, chrome or stainless steel) pipe.
- Pipe is Schedule 40, 3/4" (black, chrome or stainless steel) pipe.

System Materials

Item Number	Description	Flow	Qty
16172	Total Flood (TF)	9.0	9
16174	Three-Way (3WAY)	2.0	2
16190	Duct and Plenum (DP)	4.0	4
16208	AGENT CYLINDER ASY â€“ IS45ABC		2
16207	AGENT CYLINDER ASY â€“ IS35ABC		3
16225	JOB LINK QUICK RESPONSE (200 F / 93 C)		14
12328	FUSIBLE LINK (360 F / 182 C)		2
16226	JOB LINK QUICK RESPONSE (286 F / 141 C)		2
12326	FUSIBLE LINK (212 F / 100 C)		1
18001	MRM - Mechanical Release Module		2
11993	Manual Pull Station - English - Rectangular		2
12856	Nitrogen Cylinder - 10 in(3)		2
10147	Pneumatic Control Head		5
12508	Detector Bracket Assembly - Includes Bracket, Linkage & Con		18
16235	Compression Seal - 3/4" EMT		12
22279	Quick Seal Corner Pulley Adapter - Fits CP5		12
18252	Quick Seal - 1" Pipe		2
16386	Alarm Bell 6" 115 VAC		1
15765	Mechanical Time Delay		2

Total Flow Points: 15.0

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Independence, MO 64055

For:
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451 SE Oldham Rd
Lees Summit , MO 64081

Fire Suppression System Design Specifications

Notes

- Piping Requirements: Piping diagrams include limitations on pipe length and fittings. System piping must be balanced. Balanced piping is that in which the difference between the shortest actual pipe length from the 1" tee to the nozzle and the longest actual pipe length from the 1" tee to the nozzle does not exceed 10% of the actual pipe length from tee to nozzle. The number and type of fittings for both tee to nozzle sections must be equal.

- Remote pull station shall be 48" above finished floor and in the path of egress.

- System shall have manual and automatic methods of actuation.

- Upon activation of system all electrical & fuel must shut down.

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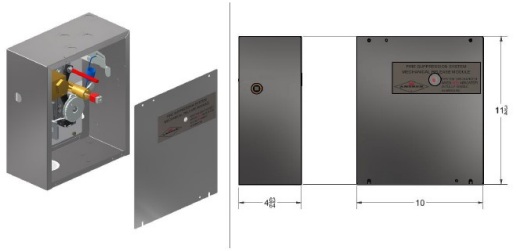
Amerex Fire Suppression System Specifications

MECHANICAL RELEASE MODULE



P/N: 18001

The new MRM combines the same features and functionality as the original MRM along with increased detection capabilities and far simpler means of setting the detection cable tension. The slide plate and collapsible column are now Teflon coated. The MRM is available in the above configurations, now preinstalled in its own enclosure.

Setting the detection cable tension does not require the use of any tools (once the cable is locked down into the large, knurled ratchet wheel). A large lever to the right of the ratchet wheel is used to increase the cable tension. Alignment of the bottom edge of the lever with markings on a label indicates when the proper tension has been achieved. Lowering cable tension to change out detection links is now also much simpler.

There is also a MRM available without the enclosure, P/N 11977. This has the same purpose and functionality as the MRM (P/N 18001). It is often used in conjunction with the Single

NITROGEN ACTUATION CYLINDERS

Part No.	12856 (10 in³)	
Diameter	1.998 in	5.07 cm
Length	6 3/8 in	16.19 cm
Part No.	09956 (15 in³)	
Diameter	1.998 in	5.07 cm
Length	9 11/25 in	24 cm

Typical Pressure	12856 / 09956	
@ 40F	~1700 PSI	~11722 kPa
@ 70F	1800 PSI	12411 kPa
@ 100F	~1900 PSI	~12893 kPa

P/N: 12856 / 09956

The N2 Actuation Cylinder supplies nitrogen gas pressure to the Agent Cylinder Discharge Valve through the actuation network for the purpose of opening the Agent Cylinder. Each Actuation Cylinder is charged to 1800 psig (12410 KPa) at 70°F (21°C)

The 10 in³ N_2 Actuation Cylinder (P/N 12856) contains enough nitrogen to actuate up to ten total of Models 275 / 375 / 475 Agent Cylinders Assemblies in any combination. A total of six Model 600 Agent Cylinders Assemblies OR a total of six Agent Cylinders when the mix contains at least one Model 600 Agent Cylinder Assemblies.

The 15 in³ N2 Actuation Cylinder (P/N 09956) contains enough nitrogen to actuate up to ten total of Models 275 / 375 / 475 & 600 Agent Cylinders Assemblies in any combination.

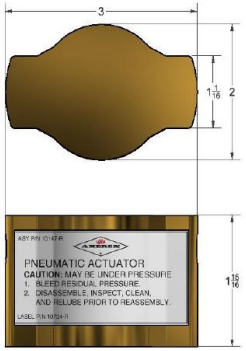
A Replacement Rupture Disc (P/N 09958) is available for both cylinders for use by certified

FUSIBLE / JOB LINK DETECTOR BRACKET

P/N: 12508

Each Detector Bracket in the AMEREX KP System is comprised of three parts the Detector Bracket, Detector Linkage and two EMT fittings. The fusible link is ordered separately. The bracket serves as support for the linkage and is attached to a rigid surface. The linkage supports the fusible link and a continuous cable run under tension. At a predetermined temperature the fusible link will separate, relieving tension on the cable and actuating the

KP600 PNEUMATIC ACTUATOR



P/N: 10147

The Pneumatic Actuator is required for every pneumatically actuated. KP600 Agent Cylinder Assembly. The actuator is bolted directly to the top of the agent cylinder discharge valve. When actuation occurs at the MRM or PRM, the pneumatic pressure from the nitrogen cylinder enters the actuator through ¼" NPT threaded ports on either side. The actuation pressure forces the piston inside to extend and depress the valve stem of the discharge valve. Resetting is easier than the previous discontinued

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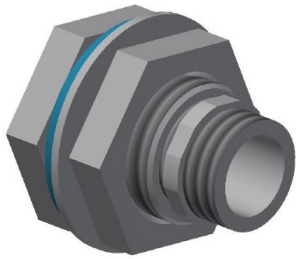
Amerex Fire Suppression System Specifications

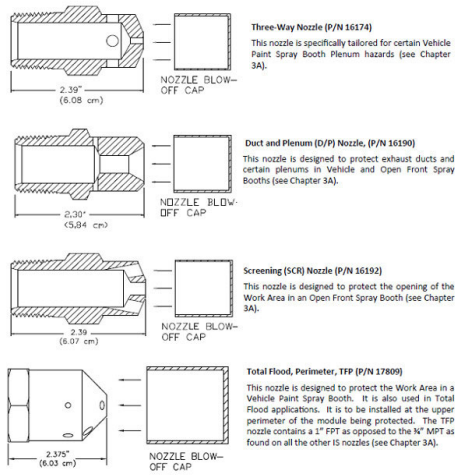
QUICK SEAL CORNER PULLY ADAPTER



P/N 22279 - EMT THREAD - HOLE SIZE 1-1/8" DIA.

This listed mechanical bulkhead fitting provides a close connection to a CP5 corner pulley. The close coupling of the two assist in alignment of the conduit run to a detection bracket.

IS DISCHARGE NOZZLES



Three-Way Nozzle (P/N 16174)

This nozzle is specifically tailored for certain Vehicle Paint Spray Booth Plenum hazards (see Chapter 3A).

Duct and Plenum (D/P) Nozzle, (P/N 16190)

This nozzle is designed to protect exhaust ducts and certain plenums in Vehicle and Open Front Spray Booths (see Chapter 3A).

Screening (SCR) Nozzle (P/N 16192)

This nozzle is designed to protect the opening of the Work Area in an Open Front Spray Booth (see Chapter 3A).

Total Flood, Perimeter, TFP (P/N 17809)

This nozzle is designed to protect the Work Area in a Vehicle Paint Spray Booth. It is also used in Total Flood applications. It is to be installed at the upper perimeter of the module being protected. The TFP nozzle contains a 1" FPT as opposed to the ¾" MPT as found on all the other IS nozzles (see Chapter 3A).

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16226	JOB LINK QUICK RESPONSE (286		2
12326	FUSIBLE LINK (212 F / 100 C)		1
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11993	Manual Pull Station - English - Recta		2
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12508	Detector Bracket Assembly - Includes		18
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Total Flow Points: 15.0

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GENERAL STRUCTURAL NOTES

APPLY UNLESS NOTED ON DRAWINGS. IN CASE OF CONFLICT BETWEEN GSN, DETAILS AND PLANS, THE GREATER REQUIREMENTS GOVERN.

- DESIGN INFORMATION:

  BOOTH AND EQUIPMENT HAS BEEN DESIGNED BASED ON THE CURRENT EDITION OF THE INTERNATIONAL BUILDING CODE

  RISK CATEGORY: II
  SEISMIC IMPORTANCE FACTOR: IE=1
  MAPPED SPECTRAL RESPONSE ACCELERATION:
    Ss =0.100
    S1 =0.068
  SITE CLASS: D (ASSUMED)
  SPECTRAL RESPONSE COEFFICIENT:
    Sds=0.107
    Sd1=0.109
  SEISMIC DESIGN CATEGORY: B
  SEISMIC-FORCE-RESISTING SYSTEMS:
    STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE, EXCLUDING CANTILEVER COLUMN SYSTEMS
      RESPONSE MODIFICATION FACTOR: R=3
      SEISMIC RESPONSE COEFFICIENT: Cs=0.036
    LIGHT-FRAMED WALLS WITH SHEAR PANELS OF ALL OTHER MATERIALS
      RESPONSE MODIFICATION FACTOR: R=2
      SEISMIC RESPONSE COEFFICIENT: Cs=0.054
  ANALYSIS PROCEDURE USED:
    EQUIVALENT LATERAL FORCE PROCEDURE
  BASIC WIND SPEED: 109 MPH
    (PORTIONS OF EQUIPMENT THAT IS OUTDOOR ONLY - IE STACKS AND STANDS)
  BUILDING CATEGORY: INDOOR
  EXPOSURE: C
  LATERAL LIVE LOAD: 5 PSF
  DEAD LOADS: SELF-WEIGHT OF STRUCTURAL STEEL
    - 3.2 PSF (ROOF)
    - 5.7 PSF (WALLS)
    - 2.5 PSF (PLENUM)
  BOOTH ROOF LIVE LOADS: N/A PSF
  LIVE LOADS: 300 LBS AT MIDPOINT OF FRAME BEAM

- FOUNDATION INFORMATION:

  CAPACITY OF THE FOUNDATION/SLAB TO SUPPORT GFS BOOTHS AND EQUIPMENT IS NOT THE RESPONSIBILITY OF GFS.

- ANCHORS INDICATED ARE BASED ON ASSUMPTIONS OF EXISTING CONDITIONS (LISTED BELOW). THESE ASSUMPTIONS ARE MADE IN ORDER FOR GFS TO PROVIDE ANCHOR BOLT HOLES IN THE BASE PLATES AND PANELS. EXISTING CONDITIONS SHOULD BE VERIFIED BY THE OWNER AND ANY DEVIATIONS SHOULD BE CONVEYED TO GFS PRIOR TO FABRICATION.

  <u>1/4"ϕ SCREW ANCHOR</u> - 1/4"Ø POWERS (DEWALT) SCREW-BOLT+ SCREW ANCHORS EMBEDDED 1 15/16" PER ICC ESR-3889 TO SECURE PANELS TO CONCRETE. IN LIEU OF THE POWERS (DEWALT) ANCHOR, 1/4"ϕ HILTI KWIK HUS-EZ SCREW ANCHORS EMBEDDED 1 15/16" PER ICC ESR-3027 MAY BE USED. EACH WALL/BAY IS REQUIRED TO HAVE ANCHORS AT 18" O.C. MAX, UNLESS NOTED OTHERWISE. EACH WALL SHALL HAVE (1) ANCHOR 6" MAXIMUM FROM END OR CORNER AND A MINIMUM OF (2) ANCHOR PER WALL/BAY. INSTALL ANCHORS PER MANUFACTURER'S RECOMMENDATION. SEE DETAILS FOR ADDITIONAL INFORMATION. A PREAPPROVED ANCHOR WITH A CAPACITY EQUAL TO OR GREATER THAN THE SPECIFIED ANCHOR AND WITH A CURRENT ICC REPORT MAY BE USED IN LIEU OF THE ANCHOR SPECIFIED. ALL OTHER RESTRICTIONS (INCLUDING BUT NOT LIMITED TO EDGE DISTANCE AND EMBEDMENT) SHALL BE CONSIDERED.

  <u>3/8"ϕ WEDGE ANCHOR</u> - 3/8"Ø POWERS (DEWALT) POWER-STUD+ SD1 WEDGE ANCHORS EMBEDDED 2" MINIMUM PER ICC ESR-2818. FOR OUTDOOR USE, USE 3/8"Ø POWERS (DEWALT) POWER-STUD+ SD4 WEDGE ANCHORS EMBEDDED 2" MINIMUM PER ICC ESR-2502. IN LIEU OF THE POWERS (DEWALT) ANCHOR, 3/8"ϕ HILTI KWIK BOLT TZ WEDGE ANCHORS EMBEDDED 2" MINIMUM PER ICC ESR-1917 MAY BE USED. STAINLESS STEEL HILTI KWIK BOLT TZ SHALL BE USED FOR OUTDOOR CONDITIONS. SEE DETAILS FOR NUMBER OF ANCHORS REQUIRED AND ADDITIONAL INFORMATION. INSTALL ANCHORS PER MANUFACTURER'S RECOMMENDATION. A PREAPPROVED ANCHOR WITH A CAPACITY EQUAL TO OR GREATER THAN THE SPECIFIED ANCHOR AND WITH A CURRENT ICC REPORT MAY BE USED IN LIEU OF THE ANCHOR SPECIFIED. ALL OTHER RESTRICTIONS (INCLUDING BUT NOT LIMITED TO EDGE DISTANCE AND EMBEDMENT) SHALL BE CONSIDERED.

  ANCHOR SPECIFICATION IS BASED ON THE FOLLOWING ASSUMPTIONS OF EXISTING CONDITIONS:
  -- MINIMUM CONCRETE COMPRESSIVE STRENGTH IS 2500 PSI.
  -- MINIMUM SLAB DEPTH IS 4".
  -- MINIMUM SLAB DEPTH FOR PAINT KITCHEN IS 6".

- COLD-FORMED STEEL:

  ALL COLD-FORMED STEEL MEETS THE REQUIREMENTS OF THE LATEST EDITION OF THE AISI SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS. ALL COLD-FORMED STEEL IS COMMERCIAL GRADE WITH A YIELD STRENGTH OF 24 KSI AND AN ULTIMATE STRENGTH OF 40 KSI.

- STRUCTURAL STEEL:

  ALL STRUCTURAL STEEL FABRICATION AND CONSTRUCTION COMPLY WITH THE LATEST AISC HANDBOOKS AND CODES.
  ALL STEEL IS ASTM A36, EXCEPT AS FOLLOWS:
  -- WIDE FLANGE SECTIONS - ASTM A992,
  -- PIPE SECTIONS - ASTM A53 GRADE B,
  -- HSS SECTIONS - ASTM A500 GRADE B
  -- BOLTS ARE A325-N AND SHALL BE SNUG-TIGHTENED.

- WELDING:

  WELDERS HOLD CURRENT VALID CERTIFICATES AND HAVE CURRENT EXPERIENCE IN TYPE OF WELD CALLED FOR. STRUCTURAL STEEL WELDING WITH LOW HYDROGEN TYPE, E70 AND E60 FOR LIGHT GAUGE STEEL. STRUCTURAL STEEL WELDING CONFORMS TO THE "STRUCTURAL WELDING CODES-STEEL" AWS D1.1, CURRENT EDITION.

GLOBAL FINISHING SOLUTIONS
12731 NORWAY ROAD
OSSEO, WI 54758 USA
800-848-8738
globalfinishing.com

Digitally signed by DANIEL M GEORGE
Date: 2021.10.18 08:02:30 -05'00'

SCALE	DRAWN BY	DATE	REVIEW BY	REVIEW DATE
NTS	DAT	10/13/2021	DAT	10/13/2021

MODEL INFO: GSN-NOTES, GENERAL STRUCTURAL NOTES

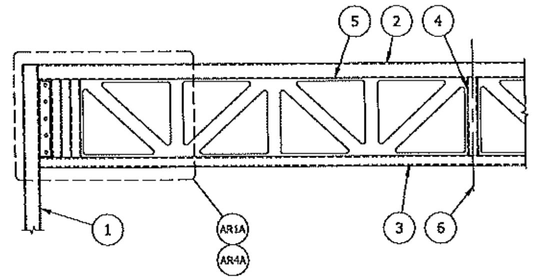
SOLD TO: CRASH CHAMPIONS, 601 OAKMONT LN, SUITE 400, WESTMONT, IL 60559

SHIP TO: CRASH CHAMPIONS LEE'S SUMMIT, 451 SE OLDHAM PKWY, LEE'S SUMMIT, MO 64081

ORDER/SERIAL NUMBER: U132448

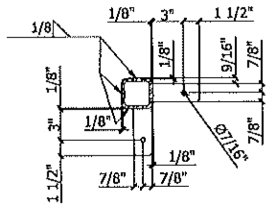
DRAWING SET	REVISION
SD	A

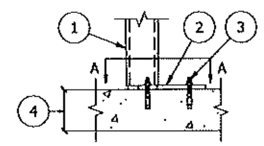
DRAWING: GSN-NOTES



1. STEEL COLUMN - HSS3x3x5/16.
2. TRUSS TOP CHORD - HSS3x2x1/8.
3. TRUSS BOTTOM CHORD - HSS2x2x1/8.
4. VERTICAL TUBE WEB MEMBER - HSS2x2x1/4.
5. CUT OUT PLATE STEEL WEB - 3/8" THICKNESS.
6. SYMMETRICAL ABOUT CENTERLINE.

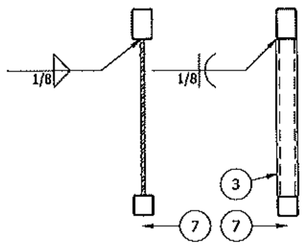
AR8A **12' TO 16' LONG FRAME ELEVATION**
U132448-A



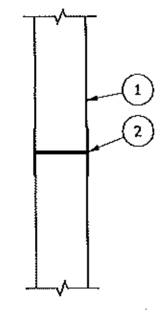


1. STEEL COLUMN PER FRAME ELEVATION (AR8A).
2. 3/8" BASE PLATE.
3. SEE 3/8"ϕ WEDGE ANCHOR NOTES ON GSN.
4. EXISTING SLAB ON GRADE 4" MIN CONCRETE THICKNESS. VERIFICATION OF SLAB NOT BY GFS.

AR5A **CORNER COLUMN**
U132448-A

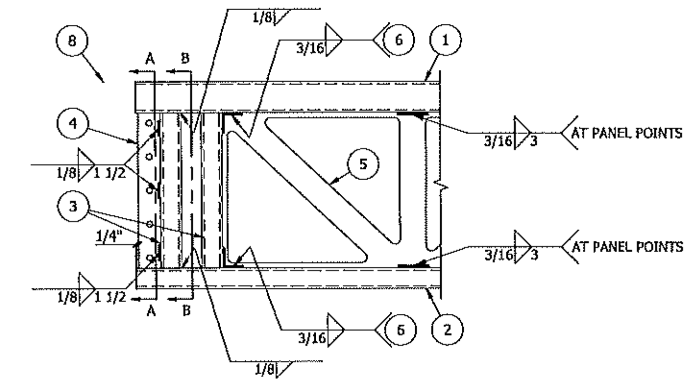


1. FRAME TOP CHORD - SEE FRAME ELEVATION FOR SIZE.
2. FRAME BOTTOM CHORD - SEE FRAME ELEVATION FOR SIZE.
3. HSS2x2x1/4 VERTICAL WEB MEMBER.
4. 3/8" PLATE WITH (5) 1/2"ϕ A325-N BOLTS.
5. FRAME WEB PLATE - SEE FRAME ELEVATION FOR THICKNESS.
6. 2" LONG HORIZONTALLY FROM FRAME WEB PLATE TO CHORD AND 2" VERTICALLY FROM FRAME WEB PLATE TO VERTICAL WEB MEMBER - CONTINUOUS THROUGH CORNER.
7. SEE BOTTOM CHORD ATTACHMENT DETAIL (AR2C), IF OCCURS, FOR CONNECTION INFORMATION.
8. SEE COLUMN SHEAR TAB DETAIL (AR4A) FOR COLUMN & SHEAR TAB INFORMATION.

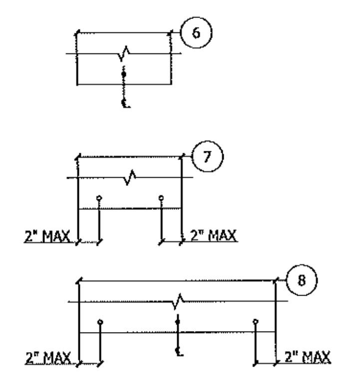


1. DUAL SKIN INSULATED PANEL.
2. H-CHANNEL - 20GA.

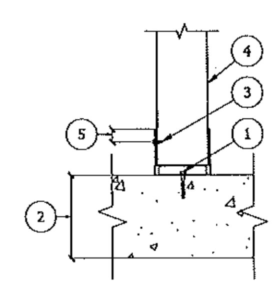
AR6A **PANEL TO PANEL CONNECTION**
U132448-A,B,C



AR1A **TRUSS CONNECTION TO COLUMN**
U132448-A

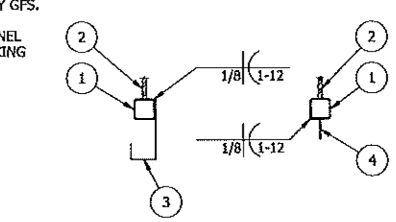


1. SEE 1/4"ϕ SCREW ANCHOR NOTES ON GSN.
2. EXISTING SLAB ON GRADE. 4" MIN CONCRETE THICKNESS. VERIFICATION OF SLAB NOT BY GFS.
3. #10 x 3/4" TEK SCREW.SEE PANEL BOTTOM ELEVATION FOR SPACING INFORMATION.
4. DUAL SKIN INSULATED PANEL.
5. 1/2" MIN - 3/4" MAX
6. 0" - 9" PANEL WIDTH.
7. 10" - 18" PANEL WIDTH.
8. 19" - 36" PANEL WIDTH.



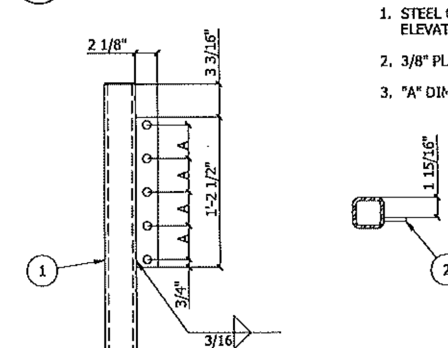
AR7 **BASE CHANNEL**
U132448-A,B,C

1. FRAME BOTTOM CHORD.
2. FRAME WEB PLATE.
3. 14 GA "J"
4. 14 GA "L"



AR2C **BOTTOM CHORD ATTACHMENT DETAIL**
U132448-A

1. STEEL COLUMN - SEE FRAME ELEVATION FOR SIZE.
2. 3/8" PLATE.
3. "A" DIMENSION IS 3 1/4".



AR4A **COLUMN SHEAR TAB**
U132448-A

GLOBAL FINISHING SOLUTIONS
12731 NORWAY ROAD
OSSEO, WI 54758 USA
800-848-8738
globalfinishing.com

SCALE	NTS
DRAWN BY	DAT
DATE	10/13/2021
REVIEW BY	DAT
REVIEW DATE	10/13/2021
MODEL INFO	GSN-DETAILS STANDARD DETAILS
SOLD TO	CRASH CHAMPIONS 601 OAKMONT LN, SUITE 400 WESTMONT, IL 60559
SHIP TO	CRASH CHAMPIONS LEE'S SUMMIT 451 SE OLDHAM PKWY LEE'S SUMMIT, MO 64081
ORDER/SERIAL NUMBER	U132448
DRAWING SET	SD
REVISION	A
DRAWING	GSN-DETAILS

THIS PAINT BOOTH IS ETL LISTED, REFERENCE ETL REPORT NUMBER 101579520CRT-001.
IT HAS BEEN REVIEWED AND FOUND TO CONFORM TO THE REQUIREMENTS OF THE FOLLOWING STANDARDS BY INTERTEK TESTING LABORATORIES.

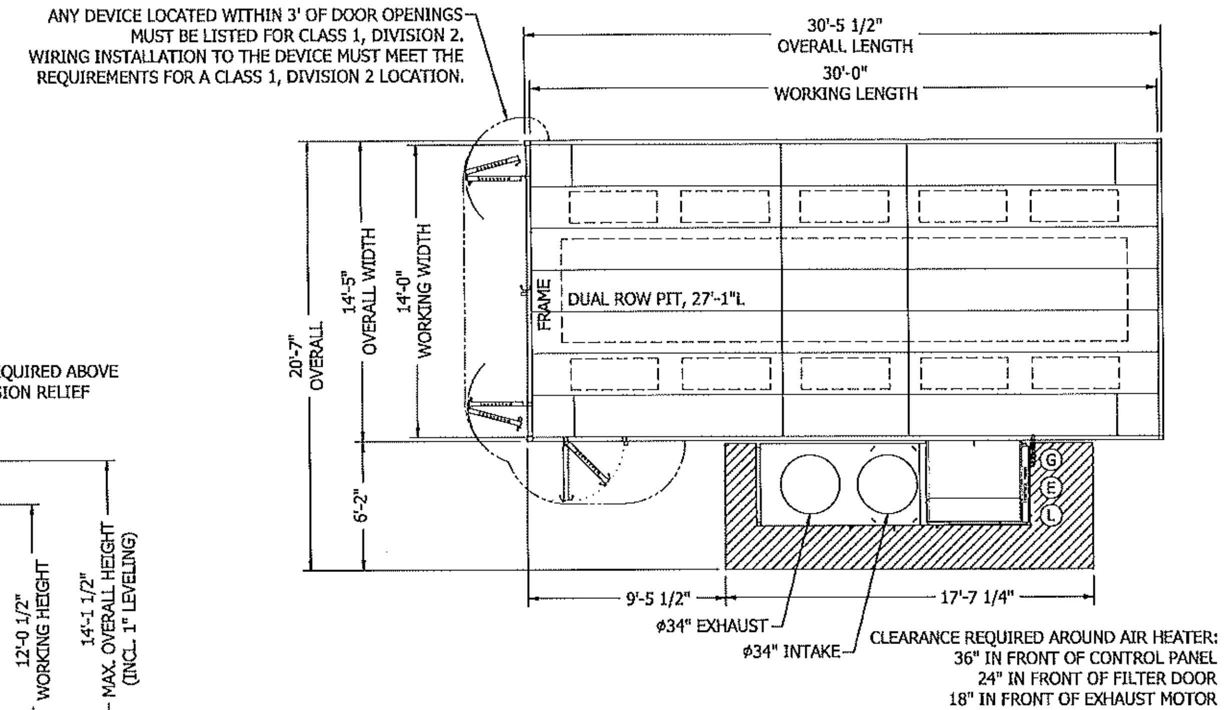
- NFPA 33 STANDARD FOR SPRAY APPLICATION USING FLAMMABLE OR COMBUSTIBLE MATERIALS
- NFPA 91 STANDARD FOR EXHAUST SYSTEMS FOR AIR CONVEYING OF VAPORS, GASES, MISTS AND NONCOMBUSTIBLE PARTICULATE SOLIDS, PAINT SPRAY BOOTHS AND DRYING OVENS
- CGA CR90-003 PAINT SPRAYBOOTHS AND DRYING OVENS

IN ADDITION TO THE ABOVE CONFORMANCES, THE PAINT BOOTH ALSO CONFORMS TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING CODES AND STANDARDS.

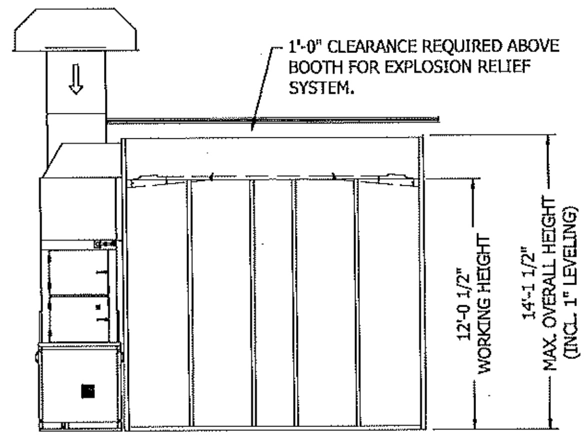
- NFPA-70 NATIONAL ELECTRIC CODE
- NFPA-86 STANDARD FOR OVENS AND FURNACES
- NFPA-101 LIFE SAFETY CODE
- OSHA SAFETY AND HEALTH STANDARDS (29CFR 110, 1910.107)
- CURRENT EDITION INTERNATIONAL BUILDING CODE
- CURRENT EDITION INTERNATIONAL FIRE CODE CHAPTER 24

PAINT BOOTH CONSTRUCTION NOTE:

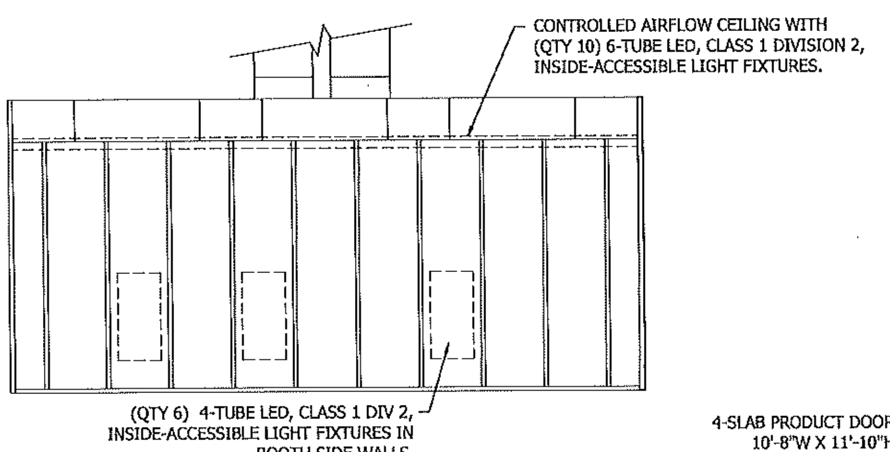
1. GAS SUPPLY REQUIRED (BY OTHERS) TO GAS CONNECTION POINT (G).
   MINIMUM GAS PRESSURE IS REQUIRED AT MAXIMUM VOLUME CONSUMED.
   MINIMUM CIRCUIT CAPACITY IS REQUIRED (BY OTHERS) TO CONNECTION POINT (E).
   LIGHTING CIRCUIT IS REQUIRED (BY OTHERS) TO CONNECTION POINT (L).
2. PAINT BOOTH IS FABRICATED FROM 18/20 GAGE WHITE PRECOAT SHEET STEEL.
3. DUCTWORK IS FABRICATED FROM 18 GAGE G90 GALVANIZED STEEL.
4. GLASS USED IN THE PAINT BOOTH MEETS AND EXCEEDS ANSI Z-97.1 STANDARD.
5. FIRE SUPPRESSION SYSTEM IS NOT INCLUDED WITH THE STANDARD PAINT BOOTH BUT IS REQUIRED BY NFPA-33.
6. THE EQUIPMENT DEPICTED IN THIS DRAWING HAS NOT BEEN APPROVED FOR OUTDOOR APPLICATIONS OR FOR USE IN HIGH SEISMIC AREAS. IN THE EVENT THAT SUCH APPLICATIONS AND/OR USES ARE CONTEMPLATED, THE PURCHASER OF THE EQUIPMENT IS RESPONSIBLE FOR NOTIFYING GFS SO THAT ADDITIONAL STRUCTURAL ANALYSIS CAN BE PERFORMED AND THE NECESSARY MODIFICATIONS CAN BE DETERMINED.
7. DUCT SUPPORT NOT SUPPLIED OR DESIGNED BY GFS. EQUIPMENT IS NOT DESIGNED TO SUPPORT DUCT. DUCT SUPPORTS SHALL BE DESIGNED TO RELIEVE THE EQUIPMENT OF ALL DUCT LOAD.
8. EXHAUST TERMINATION POINT. PER THE INTERNATIONAL FIRE CODE, THE TERMINATION POINT FOR EXHAUST DUCTS DISCHARGING TO THE ATMOSPHERE SHALL NOT BE THE LESS THAN THE FOLLOWING DISTANCES:
   1. 30 FEET FROM THE LOT LINE;
   2. 10 FEET FROM OPENINGS INTO THE BUILDING;
   3. 6 FEET FROM EXTERIOR WALLS AND ROOFS;
   4. 30 FEET FROM COMBUSTIBLE WALLS OR OPENINGS INTO THE BUILDING THAT ARE IN THE DIRECTION OF THE EXHAUST DISCHARGE;
   5. 10 FEET ABOVE ADJOINING GRADE.
9. INCLUDED BUT NOT SHOWN:
   (2) ϕ34" ROOF FLANGE



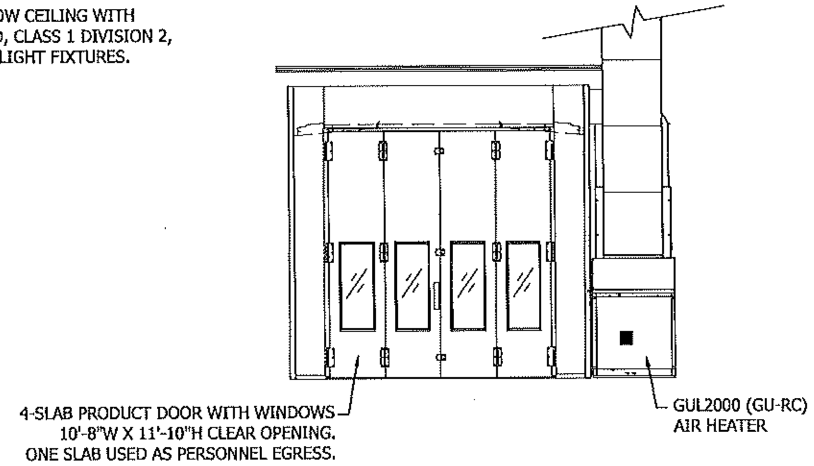
PLAN VIEW



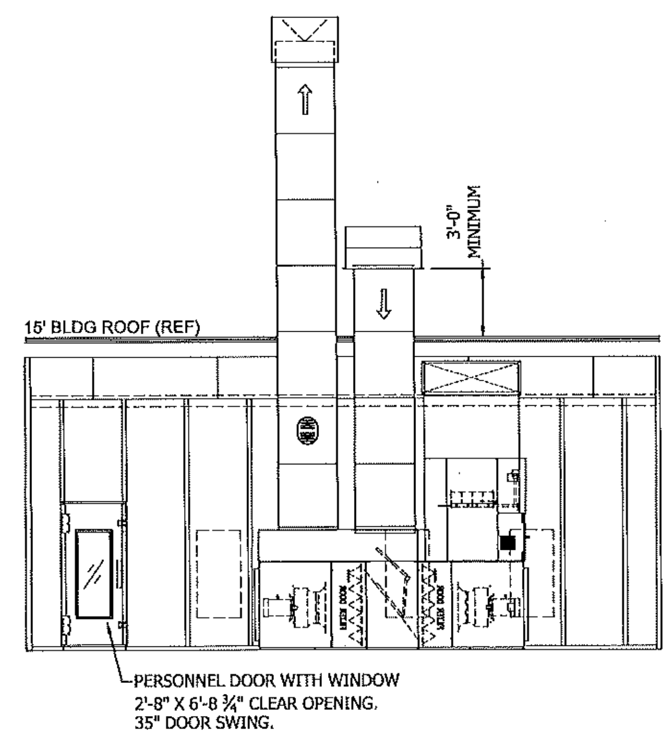
REAR ELEVATION



LH SIDE ELEVATION



FRONT ELEVATION



RH SIDE ELEVATION

AIR HEATER								
MAX AIR FLOW RATE (CFM)	INTAKE / EXHAUST MOTOR (HP)	FUEL	MAX FIRING RATE (BTU/HR)	MIN INLET PRESS. AT MAX FIRING RATE (INWC)	MAX INLET PRESS. (PSI)	TEMP. RISE (°F)	INLET PIPE SIZE NPT (IN)
15205	15 / 15	NATURAL GAS	1512605	13.0	5.0	91	1 1/4
		PROPANE	1323529	5.0		80	

MOTOR MINIMUM CIRCUIT CAPACITY					
MOTOR SPECIFICATIONS	FULL LOAD AMP DRAW /MINIMUM CIRCUIT CAPACITY				
15HP INTAKE, 15HP EXHAUST	230V 1PH	208V 3PH	230V 3PH	480V 3PH	575V 3PH
NO ADVANCE CURE				44.0 / 55.0	

LIGHTING CIRCUIT		
QUANTITY OF LIGHT FIXTURES (4-TUBE, 6-TUBE, STD OR LED)	SINGLE PHASE MINIMUM CIRCUIT CAPACITY (AMPS)	
	120V	277V
16	30	20

ϕ34" STACK WEIGHTS		
DUCT	21.97	LBS/LF
FAN	198	LBS
MOTOR	150	LBS
RINGS	45	LBS/PAIR OF RINGS
SILENCER		LBS
NO-LOSS		LBS
ARV	105	LBS
HOOD	115	LBS

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OSSEO, WI 54758 USA
800-848-8738
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Intertek 3088468

SCALE	1/4"=1'-0"
DRAWN BY	DAT
DATE	10/13/2021
REVIEW BY	DAT
REVIEW DATE	10/13/2021
MODEL INFO	ULTRA XD DOWNDRAFT BOOTH 30'L x 14'W x 12'H, W/ ULTRA AIR HEATER
SHIP TO	CRASH CHAMPIONS LEE'S SUMMIT 451 SE OLDHAM PKWY LEE'S SUMMIT, MO 64081
SOLD TO	CRASH CHAMPIONS 601 OAKMONT LN, SUITE 400 WESTMONT, IL 60559
ORDER/SERIAL NUMBER	U132448
DRAWING SET	SD
REVISION	A
DRAWING	A-GA

THIS PAINT BOOTH IS ETL LISTED, REFERENCE ETL REPORT NUMBER 101579520CRT-001.
IT HAS BEEN REVIEWED AND FOUND TO CONFORM TO THE REQUIREMENTS OF THE FOLLOWING STANDARDS BY INTERTEK TESTING LABORATORIES.

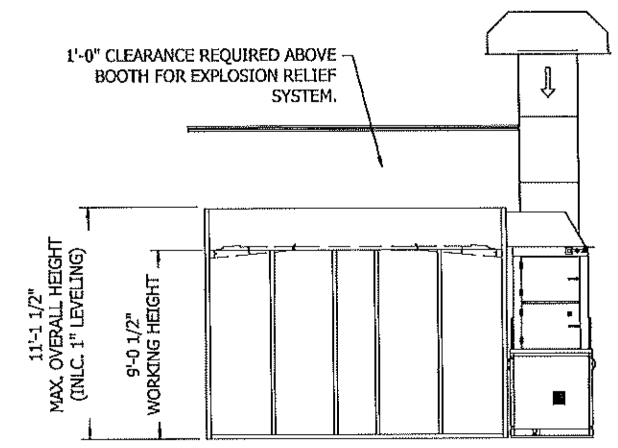
- NFPA 33 STANDARD FOR SPRAY APPLICATION USING FLAMMABLE OR COMBUSTIBLE MATERIALS
- NFPA 91 STANDARD FOR EXHAUST SYSTEMS FOR AIR CONVEYING OF VAPORS, GASES, MISTS AND NONCOMBUSTIBLE PARTICULATE SOLIDS, PAINT SPRAY BOOTHS AND DRYING OVENS
- CGA CR90-003 PAINT SPRAYBOOTHS AND DRYING OVENS

IN ADDITION TO THE ABOVE CONFORMANCES, THE PAINT BOOTH ALSO CONFORMS TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING CODES AND STANDARDS.

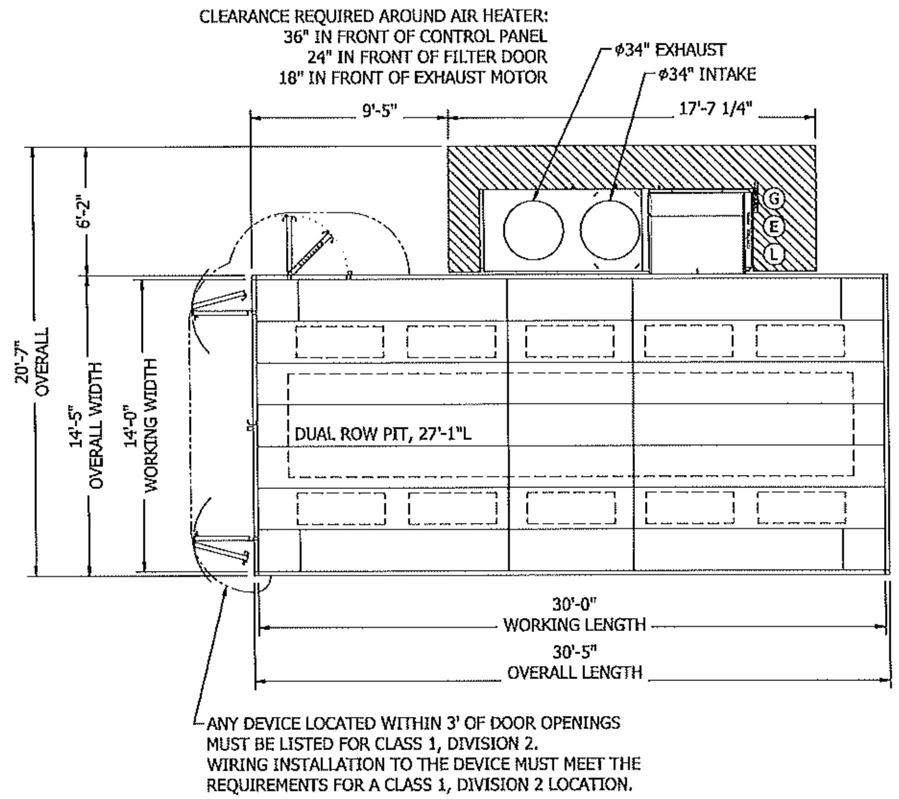
- NFPA-70 NATIONAL ELECTRIC CODE
- NFPA-86 STANDARD FOR OVENS AND FURNACES
- NFPA-101 LIFE SAFETY CODE
- OSHA SAFETY AND HEALTH STANDARDS (29CFR 110, 1910.107)
- CURRENT EDITION INTERNATIONAL BUILDING CODE
- CURRENT EDITION INTERNATIONAL FIRE CODE CHAPTER 24

PAINT BOOTH CONSTRUCTION NOTE:

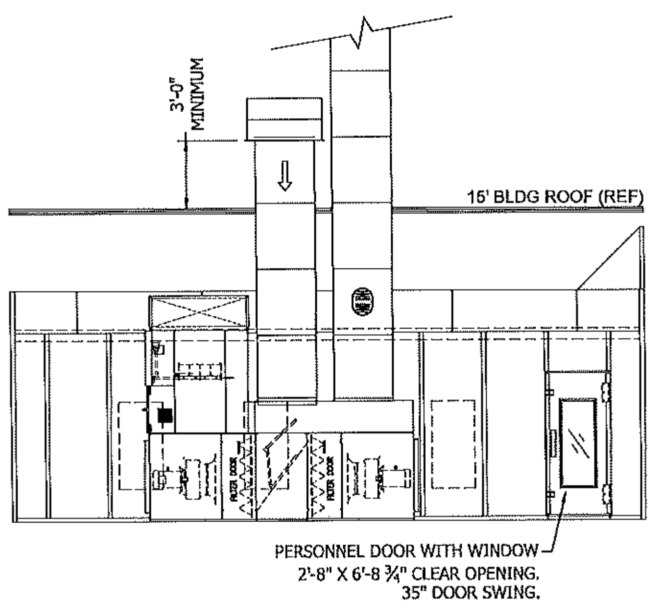
1. GAS SUPPLY REQUIRED (BY OTHERS) TO GAS CONNECTION POINT (G). MINIMUM GAS PRESSURE IS REQUIRED AT MAXIMUM VOLUME CONSUMED. MINIMUM CIRCUIT CAPACITY IS REQUIRED (BY OTHERS) TO CONNECTION POINT (E). LIGHTING CIRCUIT IS REQUIRED (BY OTHERS) TO CONNECTION POINT (L).
2. PAINT BOOTH IS FABRICATED FROM 18/20 GAGE WHITE PRECOAT SHEET STEEL.
3. DUCTWORK IS FABRICATED FROM 18 GAGE G90 GALVANIZED STEEL.
4. GLASS USED IN THE PAINT BOOTH MEETS AND EXCEEDS ANSI Z-97.1 STANDARD.
5. FIRE SUPPRESSION SYSTEM IS NOT INCLUDED WITH THE STANDARD PAINT BOOTH BUT IS REQUIRED BY NFPA-33.
6. THE EQUIPMENT DEPICTED IN THIS DRAWING HAS NOT BEEN APPROVED FOR OUTDOOR APPLICATIONS OR FOR USE IN HIGH SEISMIC AREAS. IN THE EVENT THAT SUCH APPLICATIONS AND/OR USES ARE CONTEMPLATED, THE PURCHASER OF THE EQUIPMENT IS RESPONSIBLE FOR NOTIFYING GFS SO THAT ADDITIONAL STRUCTURAL ANALYSIS CAN BE PERFORMED AND THE NECESSARY MODIFICATIONS CAN BE DETERMINED.
7. DUCT SUPPORT NOT SUPPLIED OR DESIGNED BY GFS. EQUIPMENT IS NOT DESIGNED TO SUPPORT DUCT. DUCT SUPPORTS SHALL BE DESIGNED TO RELIEVE THE EQUIPMENT OF ALL DUCT LOAD.
8. EXHAUST TERMINATION POINT. PER THE INTERNATIONAL FIRE CODE, THE TERMINATION POINT FOR EXHAUST DUCTS DISCHARGING TO THE ATMOSPHERE SHALL NOT BE THE LESS THAN THE FOLLOWING DISTANCES:
   1. 30 FEET FROM THE LOT LINE;
   2. 10 FEET FROM OPENINGS INTO THE BUILDING;
   3. 6 FEET FROM EXTERIOR WALLS AND ROOFS;
   4. 30 FEET FROM COMBUSTIBLE WALLS OR OPENINGS INTO THE BUILDING THAT ARE IN THE DIRECTION OF THE EXHAUST DISCHARGE;
   5. 10 FEET ABOVE ADJOINING GRADE.
9. INCLUDED BUT NOT SHOWN:
   (2) ϕ34" ROOF FLANGE



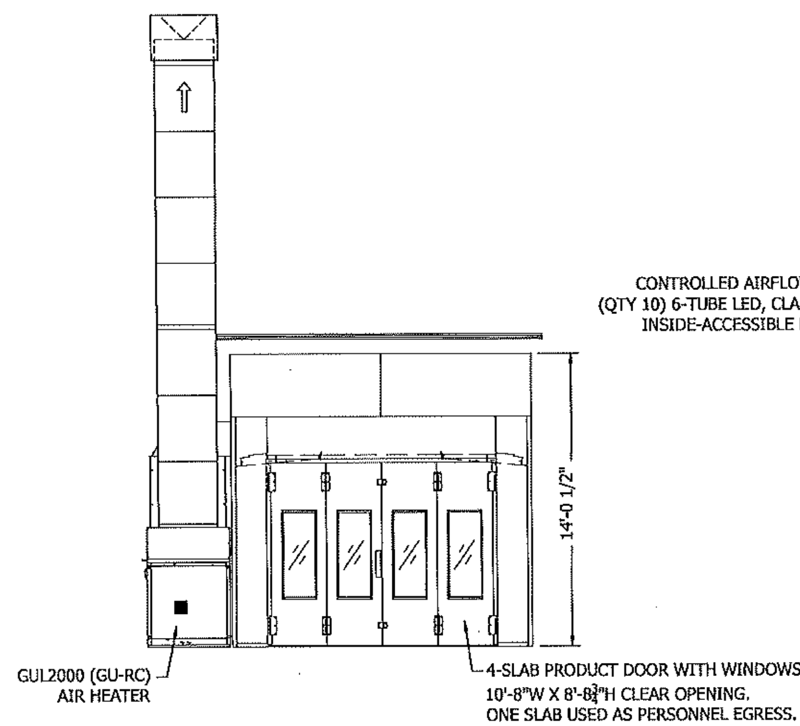
REAR ELEVATION



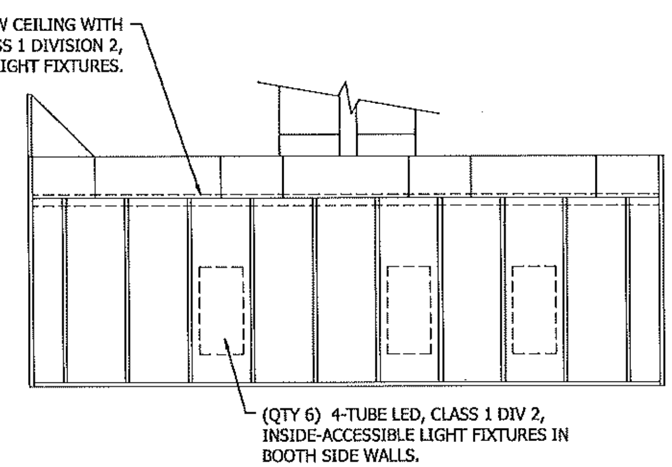
PLAN VIEW



LH SIDE ELEVATION



FRONT ELEVATION



RH SIDE ELEVATION

AIR HEATER

MAX AIR FLOW RATE (CFM)	INTAKE / EXHAUST MOTOR (HP)	FUEL	MAX FIRING RATE (BTU/HR)	MIN INLET PRESS. AT MAX FIRING RATE (INWC)	MAX INLET PRESS. (PSI)	TEMP. RISE (°F)	INLET PIPE SIZE NPT (IN)
15205	15 / 15	NATURAL GAS	1512605	13.0	5.0	91	1 1/4
		PROPANE	1323529	5.0		80	

MOTOR MINIMUM CIRCUIT CAPACITY

MOTOR SPECIFICATIONS	FULL LOAD AMP DRAW /MINIMUM CIRCUIT CAPACITY				
15HP INTAKE, 15HP EXHAUST	230V 1PH	208V 3PH	230V 3PH	480V 3PH	575V 3PH
NO ADVANCE CURE				44.0 / 55.0	

LIGHTING CIRCUIT

QUANTITY OF LIGHT FIXTURES (4-TUBE, 6-TUBE, STD OR LED)	SINGLE PHASE MINIMUM CIRCUIT CAPACITY (AMPS)	
	120V	277V
16	30	20

ϕ34" STACK WEIGHTS

DUCT	21.97	LBS/LF
FAN	198	LBS
MOTOR	150	LBS
RINGS	45	LBS/PAIR OF RINGS
SILENCER		LBS
NO-LOSS		LBS
ARV	105	LBS
HOOD	115	LBS

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STATE OF MISSOURI — DANIEL M. GEORGE — NUMBER PE-2017014222 — PROFESSIONAL ENGINEER — 10/18/2021

C ETL LISTED US — Intertek 3088468

SCALE	1/4"=1'-0"
DRAWN BY	DAT
DATE	10/13/2021
REVIEW BY	DAT
REVIEW DATE	10/13/2021

MODEL INFO
ULTRA XD DOWNDRAFT BOOTH
30'L x 14'W x 9'H, w/ ULTRA AIR HEATER

SOLD TO
CRASH CHAMPIONS
601 OAKMONT LN, SUITE 400
WESTMONT, IL 60559

SHIP TO
CRASH CHAMPIONS LEE'S SUMMIT
451 SE OLDHAM PKWY
LEE'S SUMMIT, MO 64081

ORDER/SERIAL NUMBER: U132448
DRAWING SET: SD
REVISION: A
DRAWING: B-GA

THIS PAINT MIX ROOM IS ETL LISTED, REFERENCE ETL REPORT NUMBER 100690377CRT-001. IT HAS BEEN REVIEWED AND FOUND TO CONFORM TO THE REQUIREMENTS OF THE FOLLOWING STANDARDS BY INTERTEK TESTING LABORATORIES.

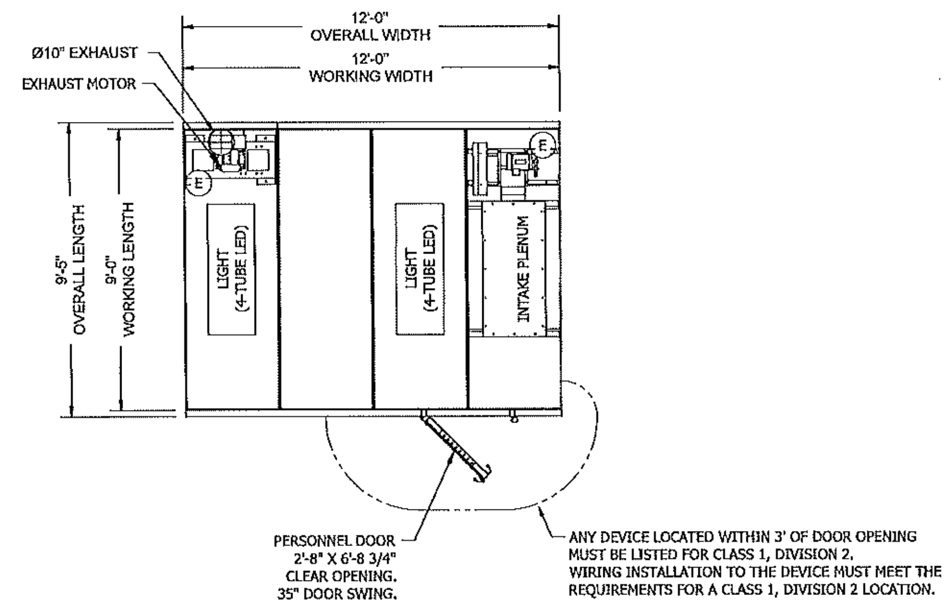
- NFPA 33 STANDARD FOR SPRAY APPLICATION USING FLAMMABLE OR COMBUSTIBLE MATERIALS
- NFPA 91 STANDARD FOR EXHAUST SYSTEMS FOR AIR CONVEYING OF VAPORS, GASES, MISTS AND NONCOMBUSTIBLE PARTICULATE SOLIDS, PAINT SPRAY BOOTHS AND DRYING OVENS

IN ADDITION TO THE ABOVE CONFORMANCES, THE MIX ROOM ALSO CONFORMS TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING CODES AND STANDARDS.

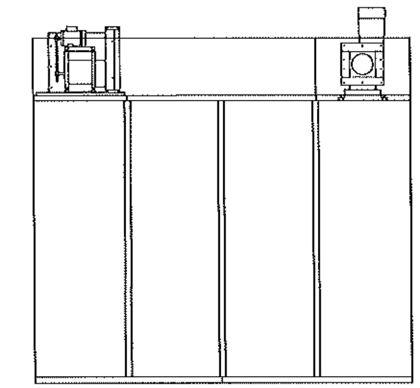
- NFPA-70 NATIONAL ELECTRIC CODE
- OSHA SAFETY AND HEALTH STANDARDS (29CFR 110, 1910.107)
- CURRENT EDITION INTERNATIONAL BUILDING CODE
- CURRENT EDITION INTERNATIONAL FIRE CODE CHAPTER 24

PAINT MIX ROOM CONSTRUCTION NOTE:

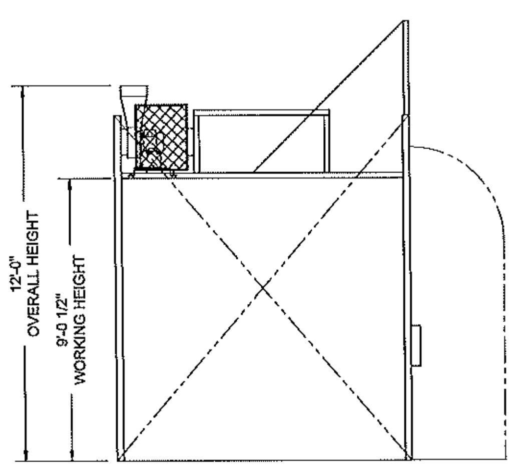
1. MAXIMUM PAINT STORAGE IN THE PAINT MIX ROOM IS 60 GALLONS.
2. MINIMUM CIRCUIT CAPACITY IS REQUIRED (BY OTHERS) TO CONNECTION POINT (E).
3. MIX ROOM IS FABRICATED FROM 18/20 GAGE WHITE PRECOAT SHEET STEEL.
4. DUCTWORK IS FABRICATED FROM 18 GAGE G90 GALVANIZED STEEL.
5. GLASS USED IN THE PAINT MIX ROOM MEETS AND EXCEEDS ANSI Z-97.1 STANDARD.
6. FIRE SUPPRESSION SYSTEM IS NOT INCLUDED WITH THE STANDARD MIX ROOM BUT IS REQUIRED BY NFPA-33.
7. PAINT MIX ROOM EXHAUST FAN AIRFLOW RATE IS 949 CFM @ 1/2" OF STATIC PRESSURE (1,740 FPM) AND MUST BE OPERATIONAL AT ALL TIMES WHEN PAINT IS BEING STORED.
8. THE EQUIPMENT DEPICTED IN THIS DRAWING HAS NOT BEEN APPROVED FOR OUTDOOR APPLICATIONS OR FOR USE IN HIGH SEISMIC AREAS. IN THE EVENT THAT SUCH APPLICATIONS AND/OR USES ARE CONTEMPLATED, THE PURCHASER OF THE EQUIPMENT IS RESPONSIBLE FOR NOTIFYING GFS SO THAT ADDITIONAL STRUCTURAL ANALYSIS CAN BE PERFORMED AND THE NECESSARY MODIFICATIONS CAN BE DETERMINED.
9. DUCT SUPPORT NOT SUPPLIED OR DESIGNED BY GFS. EQUIPMENT IS NOT DESIGNED TO SUPPORT DUCT. DUCT SUPPORTS SHALL BE DESIGNED TO RELIEVE THE EQUIPMENT OF ALL DUCT LOAD.
10. EXHAUST TERMINATION POINT. PER THE INTERNATIONAL FIRE CODE, THE TERMINATION POINT FOR EXHAUST DUCTS DISCHARGING TO THE ATMOSPHERE SHALL NOT BE LESS THAN THE FOLLOWING DISTANCES:
    1. 30 FEET FROM THE LOT LINE;
    2. 10 FEET FROM OPENINGS INTO THE BUILDING;
    3. 6 FEET FROM EXTERIOR WALLS AND ROOFS;
    4. 30 FEET FROM COMBUSTIBLE WALLS OR OPENINGS INTO THE BUILDING THAT ARE IN THE DIRECTION OF THE EXHAUST DISCHARGE;
    5. 10 FEET ABOVE ADJOINING GRADE.
    6. 25 FEET FROM ANY UNPROTECTED OPENING IN AN NONCOMBUSTIBLE OR LIMITED COMBUSTIBLE CONSTRUCTION THAT ARE IN THE DIRECTION OF THE EXHAUST DISCHARGE.
    7. 25 FEET FROM ANY EXIT DISCHARGE OR PUBLIC WAY THAT ARE IN THE DIRECTION OF THE EXHAUST DISCHARGE.
11. INCLUDED BUT NOT SHOWN:
    (1) Ø10" ROOF FLANGE



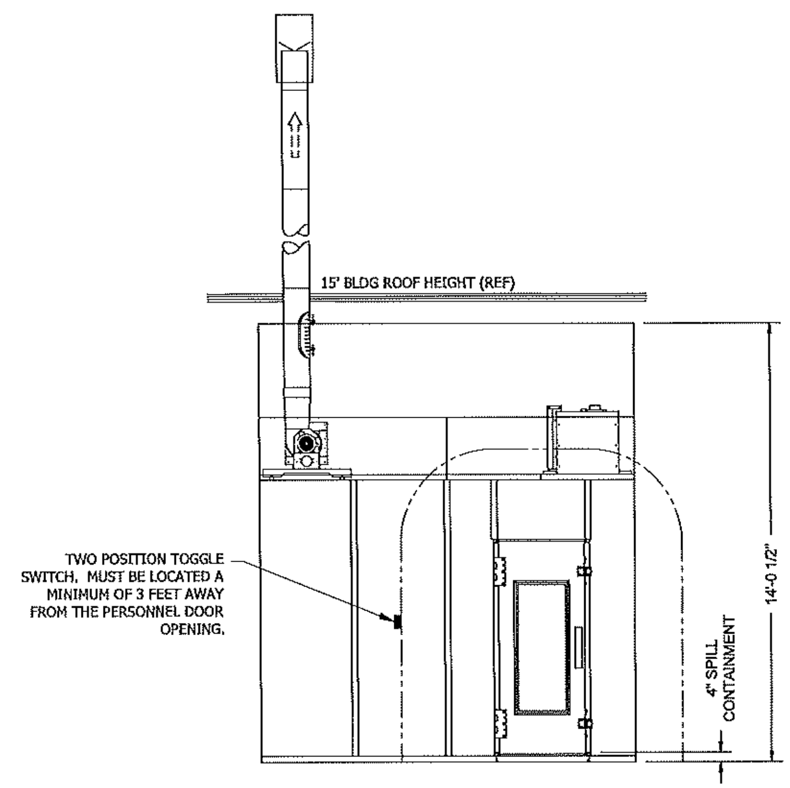
PLAN VIEW



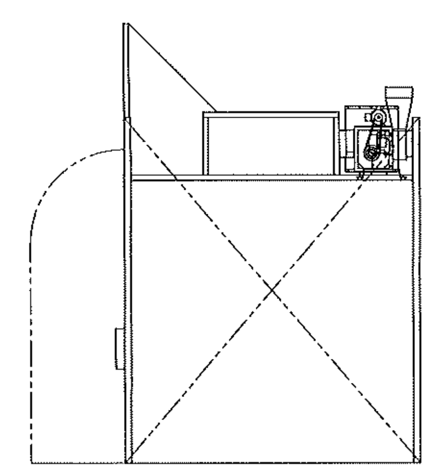
REAR ELEVATION



LH SIDE ELEVATION



FRONT ELEVATION



RH SIDE ELEVATION

ELECTRICAL REQUIREMENTS

	ELECTRICAL DEVICE	MOTOR	FULL LOAD AMP DRAW	MINIMUM CIRCUIT CAPACITY
EXHAUST FAN & INTAKE FAN	FAN MOTOR (EACH)	1/2HP, 120V, 1PH	9.8	30 AMP
	LIGHT FIXTURES	120V / 277V	1.0 / 0.5 (EACH)	

Ø10" STACK WEIGHTS

DUCT	6.47	LBS/LF
FAN	45	LBS
MOTOR	27	LBS
RINGS		LBS/PAIR OF RINGS
SILENCER		LBS
NO-LOSS		LBS
ARV	24	LBS
HOOD		LBS

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STATE OF MISSOURI — DANIEL M. — NUMBER PE-2017014232 — PROFESSIONAL ENGINEER

C ETL LISTED US
Intertek
3088468

SCALE	3/8" = 1'-0"
DRAWN BY	DAT
DATE	10/13/2021
REVIEW BY	DAT
REVIEW DATE	10/13/2021

MODEL INFO
ULTRA XD PAINT MIX ROOM
9'L x 12'W x 9'H, 2-SIDED

SOLD TO
CRASH CHAMPIONS
601 OAKMONT LN, SUITE 400
WESTMONT, IL 60559

SHIP TO
CRASH CHAMPIONS LEE'S SUMMIT
451 SE OLDHAM PKWY
LEE'S SUMMIT, MO 64081

ORDER/SERIAL NUMBER: U132448

DRAWING SET: SD — REVISION: A

DRAWING: C-GA