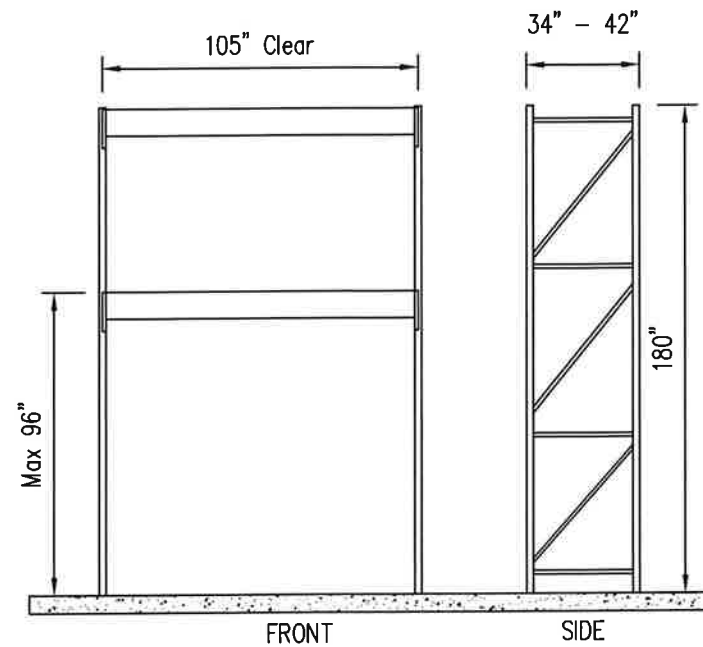
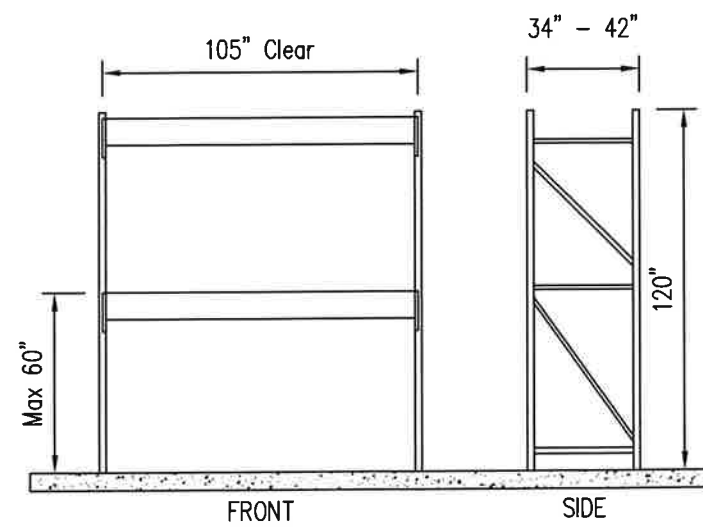


GENERAL NOTES:

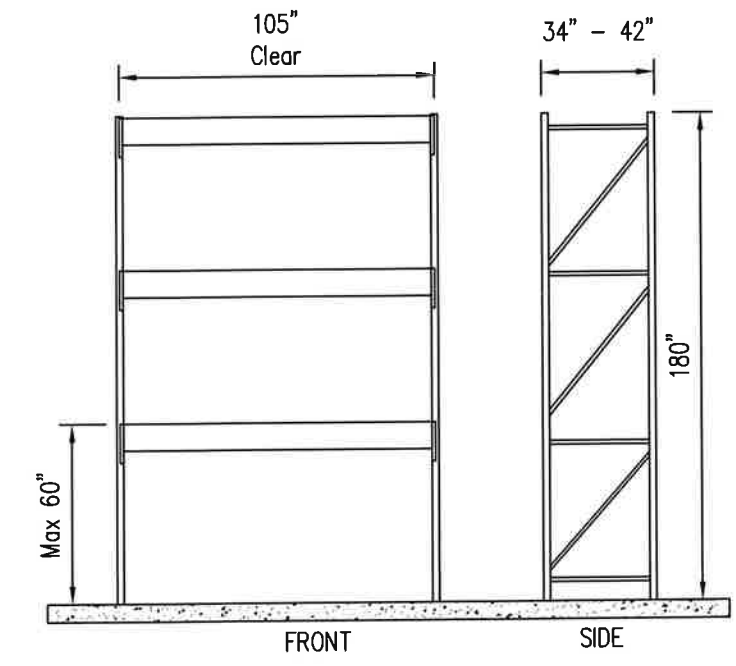
1. This drawing shows typical unit material and geometry. See Price/Costco fixture plan(A-101) for location within store. See Gary K. Munkelt & Associates, LLC Drawings RU-9 for details of the rack components.
2. **ARRANGEMENT**
Not all configurations may be installed.
A unit may have any number of beam levels if the loads per bay and the maximum spacings shown are not exceeded
3. **MATERIAL**
Components shown are minimum sizes.
Larger/heavier components may be substituted.
4. **ANCHORAGE**
Use ICC approved anchors per RU-9 UNO
Use minimum embedment of 4.5" for Wedge Type anchors for 2 & 3 Level Racks. For Screw Type anchors use a minimum embedment of 5" (Minimum embedment = Top of Concrete Slab to Bottom Tip of Anchor)
5. **PERIODIC SPECIAL INSPECTIONS** - are not required for post-installed anchors unless the Building Authority demands an inspections. Contractor to verify all inspection requirement before anchor installation.



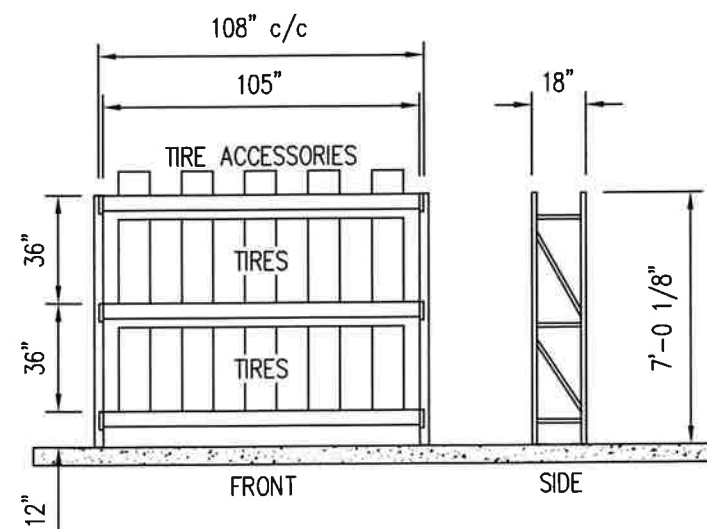
MERCHANDISE DISPLAY RACK
Upright: Min. UF-H-331
Seismic Footplate (7.5" x 5" x 3/8")
Beams:
RB-S-500
Maximum loads:
5,000 lbs per level
10,000 lbs per bay



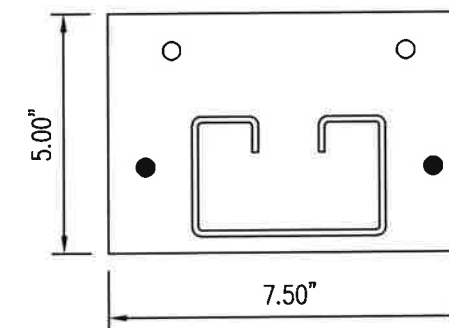
2 LEVEL RACKS
Upright: Min. UF-H-331
Seismic Footplate (7.5" x 5" x 3/8")
Beams:
RB-S-500
Maximum loads:
5,000 lbs per level
10,000 lbs per bay



3 LEVEL RACKS
Upright: Min. UF-H-331
Seismic Footplate (7.5" x 5" x 3/8")
Beams:
RB-S-500
Maximum loads:
5,000 lbs per level
15,000 lbs per bay



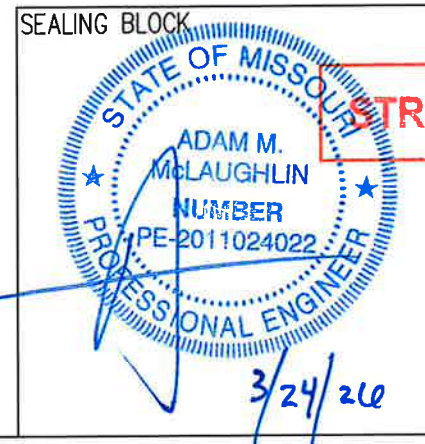
TIRE CENTER RACK
Upright: UF-S-31 Post
Standard Bracing
Beams: 105" x 5" High
Maximum loads:
1,200 lbs per Bay (Includes Base Beam)
Standard Base Plate



Anchor Locations
● Preferred
○ Alternate

Alternate holes shall only be used when anchor cannot be set in preferred hole, There shall be at least one anchor on the left and right side of the post as viewed from the front.

ANCHORAGE
SUPERCEDES RU-9 FOR 180" RACKS



STRUCTURAL DESIGN ONLY

Gary K. Munkelt & Associates, LLC
Structural Consulting Engineers
121 East Chestnut Street, Suite 101
Souderton, PA 18964
Missouri COA #2017023848
Phone 215-855-8713

DATE
03/23/2026
DRAWN
CMS
CHECKED
BJM
APPROVED

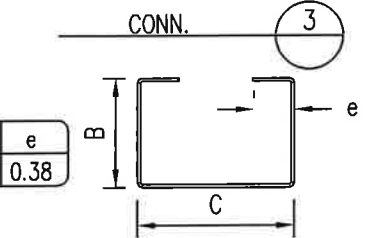
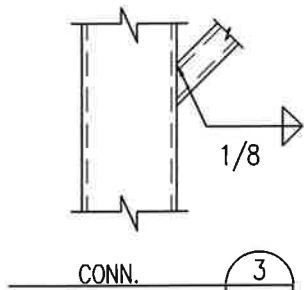
COSTCO #1838 - LEE'S SUMMIT
10 SOUTHEAST OLDHAM PARKWAY
LEE'S SUMMIT, MO 64081
STORAGE RACKS
TYPICAL CONFIGURATIONS

GKM JOB #
2603106
DRAWING #
CW-10T

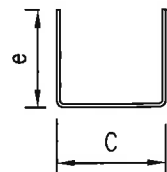
Type	A	B	d	t	Sx	Ix
RB-L-300*	3.00	2.50	1.63	0.066	0.49	0.80
RB-S-300*	3.00	2.50	1.63	0.075	0.55	0.90
RB-L-350	3.50	2.50	1.63	0.066	0.72	1.29
RB-S-350	3.50	2.50	1.63	0.075	0.82	1.45
RB-R-350	3.50	2.50	1.63	0.085	0.93	1.64
RB-L-355*	3.55	2.50	1.63	0.066	0.63	1.20
RB-S-355*	3.55	2.50	1.63	0.075	0.72	1.36
RB-L-400	4.00	2.50	1.63	0.066	0.88	1.78
RB-S-400	4.00	2.50	1.63	0.075	1.00	2.01
RB-R-400	4.00	2.50	1.63	0.085	1.13	2.27
RB-L-410*	4.10	2.50	1.63	0.066	0.79	1.72
RB-S-410*	4.10	2.50	1.63	0.075	0.90	1.95
RB-L-450	4.50	2.50	1.63	0.066	1.06	2.39
RB-S-450	4.50	2.50	1.63	0.075	1.19	2.70
RB-R-450	4.50	2.50	1.63	0.085	1.35	3.05
RB-L-465*	4.65	2.50	1.63	0.066	0.97	2.36
RB-S-465*	4.65	2.50	1.63	0.075	1.10	2.68
RB-L-500	5.00	2.50	1.63	0.066	1.24	3.10
RB-S-500	5.00	2.50	1.63	0.075	1.40	3.51
RB-R-500	5.00	2.50	1.63	0.085	1.58	3.97
RB-L-550	5.50	2.50	1.63	0.066	1.43	3.94
RB-S-550	5.50	2.50	1.63	0.075	1.62	4.46
RB-R-550	5.50	2.50	1.63	0.085	1.82	5.05
RB-L-600*	6.00	2.50	1.63	0.066	1.47	4.54
RB-S-600*	6.00	2.50	1.63	0.075	1.66	5.15
RB-R-600*	6.00	2.50	1.63	0.085	1.84	5.71
RB-L-650*	6.50	2.50	1.63	0.066	1.67	5.59
RB-S-650*	6.50	2.50	1.63	0.075	1.88	6.29
RB-R-650*	6.50	2.50	1.63	0.085	2.15	7.19

Type	C	B	e
	1.75	1.25	0.38

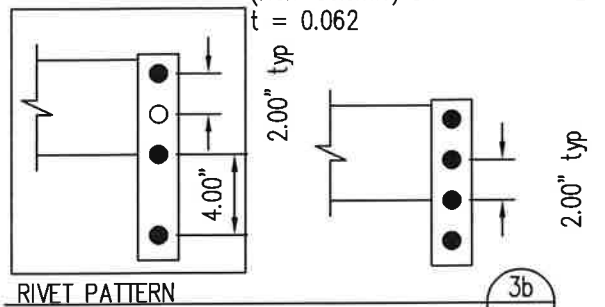
Type	C	e
std.	1.75	1.25



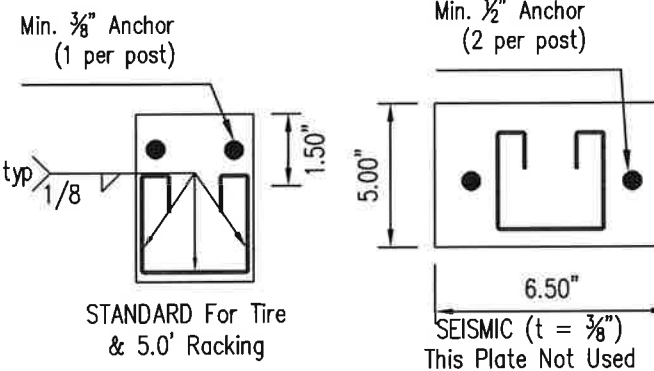
BRACE
(Seismic) DIMENSIONS
t = 14 ga



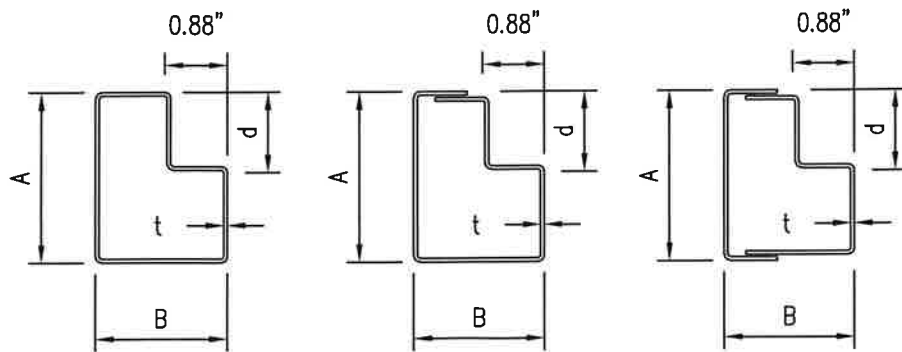
BRACE
(Non-Seismic) DIMENSIONS
t = 0.062



RIVET PATTERN
3 Rivet Clip Standard
Bolted 4 Rivet Clip Optional



BASE PLATES
COMMON SIZE ONLY
SEE INSTALLATION DRAWINGS
FOR CUSTOM SIZES AND
ANCHORAGE

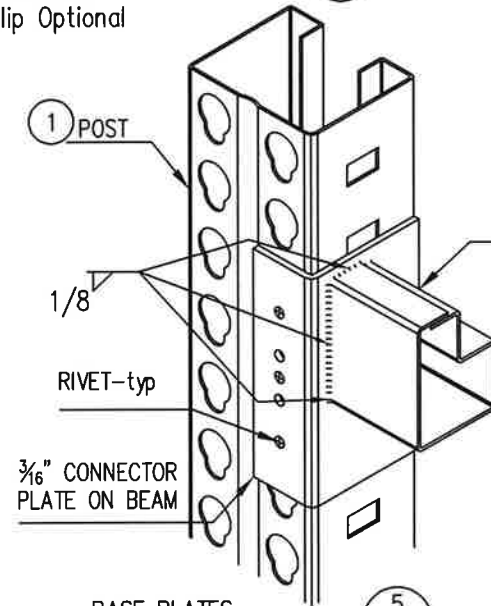


*Induction Welded
Rolled Beams

Overlapped
Rolled Beams

**Two Piece
Rolled Beams

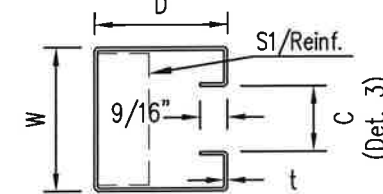
BEAMS
DIMENSIONS AND PROPERTIES
UNITS: INCHES UNO



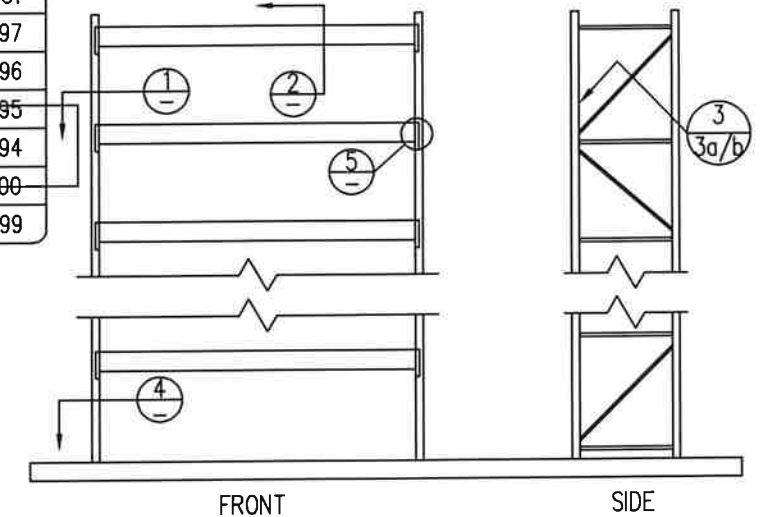
BASE PLATES
7/16" (Nom.) ASTM A502-3 Rivets

Type	W	D	t	As	Sx	rx	ry
UF-S-32I	3.00	2.75	0.075	0.56	0.55	1.21	0.84
UF-S-33I	3.00	2.75	0.075	0.64	0.65	1.21	0.98
*UF-S-33I	3.00	2.75	0.075	1.10	1.01	1.14	0.81
UF-R-33I	3.00	2.75	0.087	0.73	0.73	1.20	0.97
UF-M-33I	3.00	2.75	0.100	0.82	0.82	1.20	0.96
UF-Y-33I	3.00	2.75	0.110	0.91	0.89	1.19	0.95
UF-H-33I	3.00	2.75	0.125	1.03	1.00	1.18	0.94
UF-M-43I	4.00	2.75	0.100	0.92	1.21	1.59	1.00
UF-H-43I	4.00	2.75	0.125	1.12	1.45	1.58	0.99

*w/S1 Reinforcement



COLUMNS
DIMENSIONS AND PROPERTIES
NET SECTION-UNITS: INCHES UNO

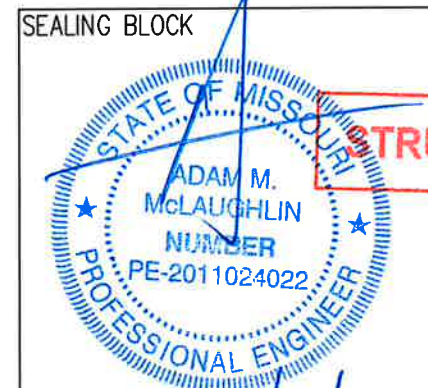


TYPICAL ELEVATION
SEE INSTALLATION DRAWING CW-10T
FOR ADDITIONAL INFORMATION

GENERAL NOTES:

- This drawing shows standard details of the rack product line only. See engineer approved installation drawings (A101 & CW-10T) for components used, special details, arrangement, dimensions.
- The installation drawings govern over this drawing.
- MATERIAL
Steel - ASTM A1008 Grade 55 UNO
Welding electrodes - AWS E70-XX (all welds single pass fillet welds designed at 50% stress levels)
- Concrete Anchors shall be ICC approved types for installation into cracked concrete. e.g.:
Simpson Strong Tie Strong bolt (#3037), Titen (#2713)
DeWalt / Powers/Rawl Power Stud+SD2 (#2502), Atomic (#3067), DeWalt Screw-Bolt+ Screw Anchor (#3889)
Hilti Kwik Bolt HSL 3 (#1545), Kwik Bolt TZ (#1917), Kwik Bolt TZ2 (#4266), HUS-EZ (#3027)

Minimum Embedment shown on Drawing CW-10T.
Special inspection are not required unless demanded by the building authority. Contractor shall determine any inspection requirements prior to anchor installation.



STRUCTURAL DESIGN ONLY

Gary K. Munkelt & Associates, LLC
Structural Consulting Engineers
121 East Chestnut Street, Suite 101
Souderton, PA 18964
Missouri COA #2017023848
Phone 215-855-8713

DATE 03/23/2026
DRAWN CMS
CHECKED BJM
APPROVED

COSTCO #1838 - LEE'S SUMMIT
10 SOUTHEAST OLDHAM PARKWAY
LEE'S SUMMIT, MO 64081
RIDG-U-RAK
STORAGE RACKS

GKM JOB # 2603106
DRAWING # RU-9

3/24/20