

## **SCOPE OF WORK**

- 1. Uninstall and relocate pallet racks from warehouse in building O1 to warehouse in building O2 as specified in drawings.
- 2. Patch any holes left in concrete floor of building O1 upon removal of pallet racks using traffic rated cement grout.
- 3. Contractor to relocate 2 fire extinguishers cabinets in Warehouse 2 of Building O2 (indicated on plans and images).
- 4. Contractor to relocate light switches (indicated on plans and images).
- 5. Demo and remove unused vents and associated electrical conduit/switch from Warehouse 1 in Building O2 (indicated on plans and images).
- 6. Cut and cap indicated duct at elbow near ceiling in warehouse 1 of Building O2.
- 7. Patch back and infill wall assembly where vents were demoed.
- 8. Provide and install a total of (24) bays of new pallet racking with (4) vertical storage sections and (3) horizontal sections per selective rack system in warehouse 1 of building O2 as indicated in layout: Uprights: 14 GA 42" X 240"

Beams" 3-3/4" X 96" 3 pin

- 9. Relocate indicated pallet racking from high bay storage rm. 102 warehouse in building O1 to warehouse 1 & 2 in building O2 as indicated in drawings
- 10. Newly installed and relocated racks to be 20' high with 6' of storage space between levels and 8' between columns.
- 11. Wire decks for pallet rack bays to be rated for at least 2000 lbs.
- 12. All pallet racks to be securely anchored to the floor using anchor bolts and 5" x 8" base plate
- 12. Contractor to provide data sheets, structural calculations prepared and stamped by a Structural Engineer licensed in the state of California and all specifications for proposed racking system.
- 13. Contractor to modify racks relocated to warehouse 2 of Building O2 in order to prevent obstruction of indicated doors and security cameras.
- 14. Adjacent equipment and furnishings must be protected.



Project Title
O1, O2
Warehouse Pallet
Racking
Relocation and
Install

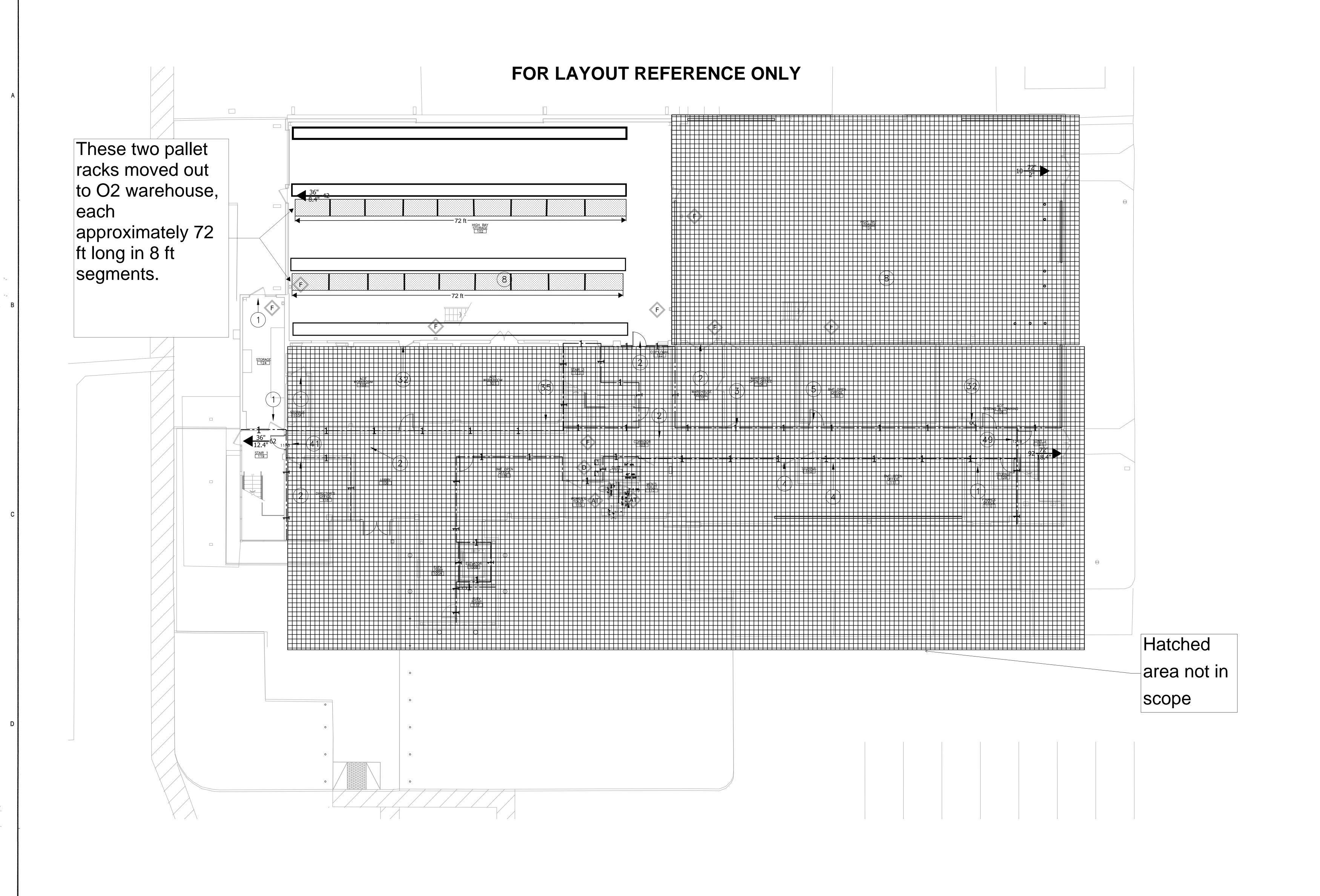
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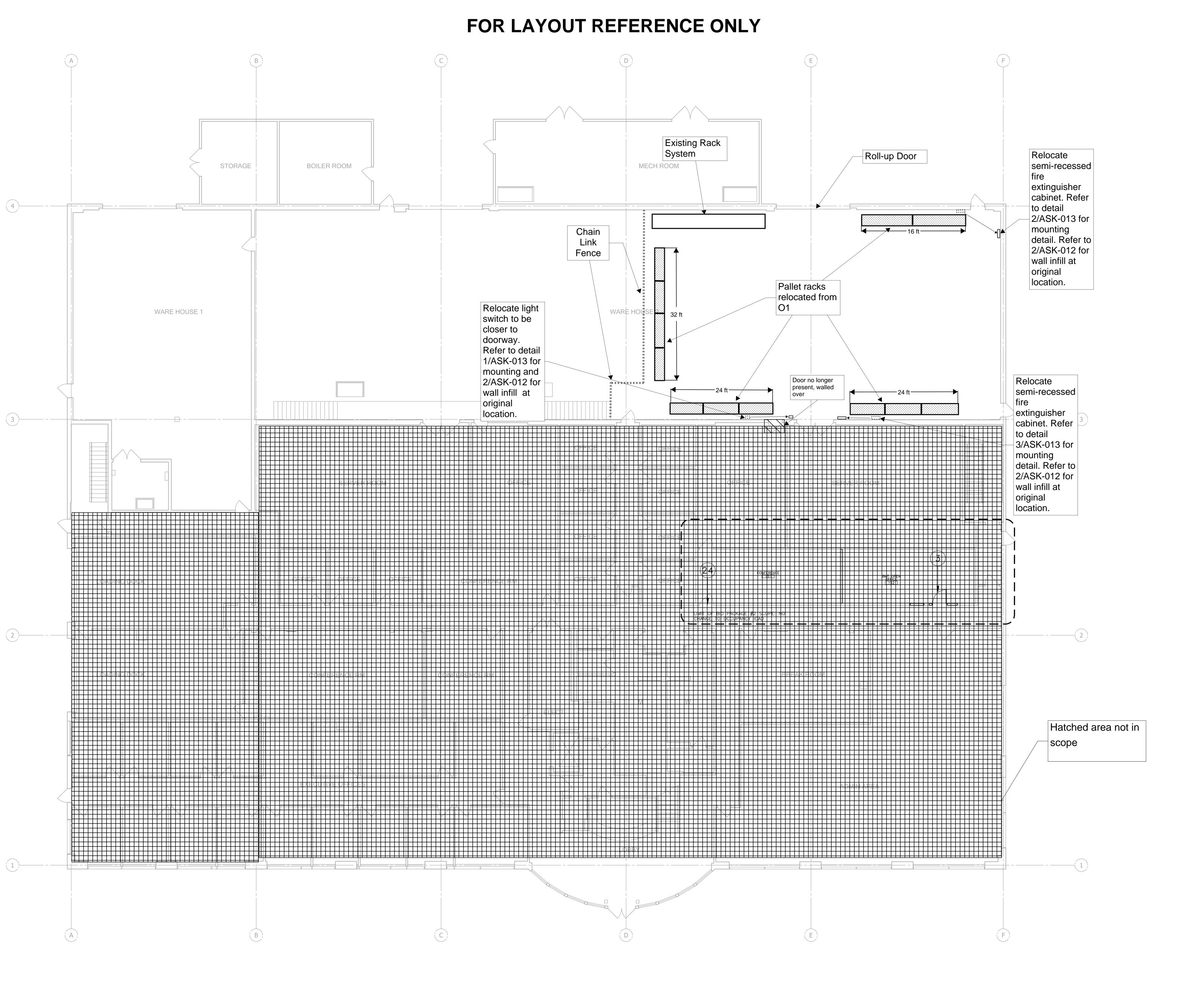
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O1 Warehouse Existing Rack Layout



Sheet Number

ASK - 002





O1, O2
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Sheet Title

O2 Warehouse 2 Rack Layout



Sheet Number

ASK - 003

## FOR LAYOUT REFERENCE ONLY Vent to be demoed. Refer to detail 1ASK-012 for wall Roll-up Doors STORAGE MECH ROOM WARE HOUSE 2 Vent to be demoed Refer to detail 1/ASK-012 for wall Pallet racks relocated 64 ft of new pallet racks (24 bays) to be



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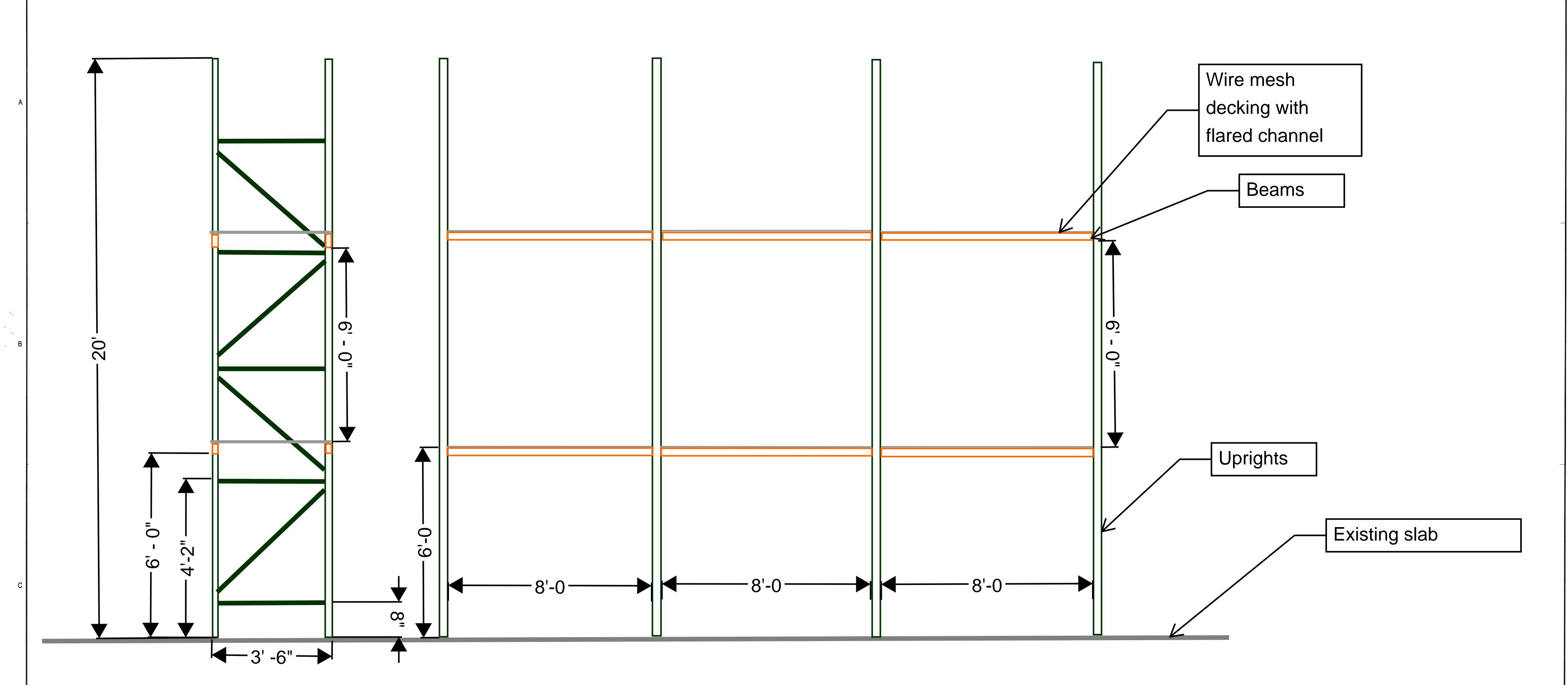
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O2
Warehouse 1
Rack Layout



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O1, O2
Warehouse Pallet
Racking
Relocation and
Install

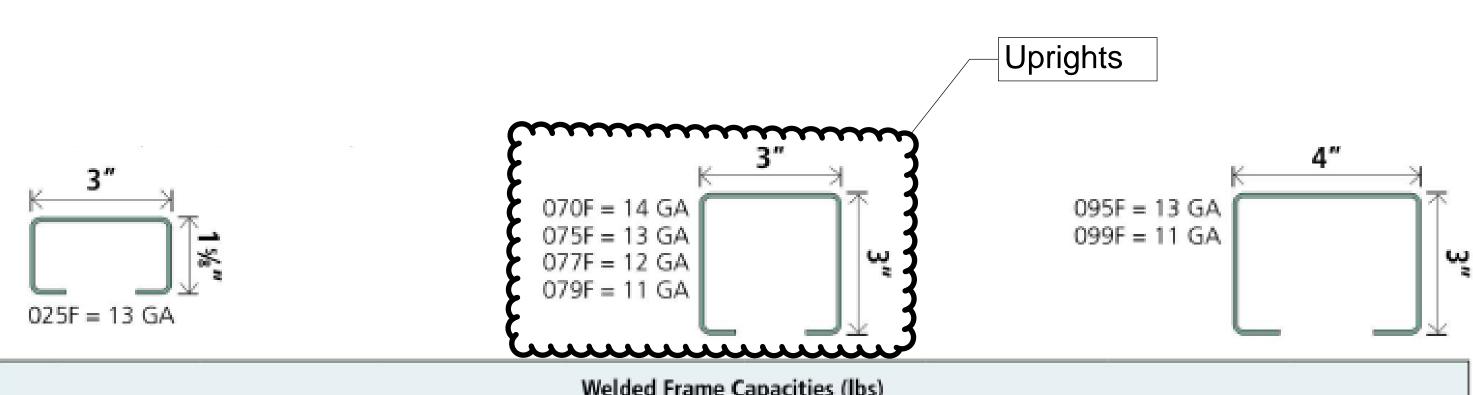
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Warehouse Rack Configuration

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			mm	Welded Frame C	apacities (lbs)			
	Model	025F	070F	075F	077F	079F	095F	099F
	Gauge	13 GA (0.090")	14 GA (0.070")	13 GA (0.090")	12 GA (0.105")	11 GA (0.120")	13 GA (0.090")	11 GA (0.120")
	36"	23,400	28,600	38,400	44,300	50,000	37,500	60,200
P()	42"	21,900	25,900	34,600	39,800	44,900	37,500	60,200
H H	48"	19,300	23,000	30,600	35,200	39,700	36,300	57,900
 leigh	54"	16,700	20,000	26,400	30,400	34,300	33,900	53,200
Pag.	60*	15,000	17,700	23,100	26,600	30,000	31,300	48,400
pod	66"	13,400	16,000	20,900	24,000	27,100	28,500	43,500
Unsupported Height (HbL)	72"	11,700	14,400	18,700	21,400	24,100	25,800	38,700
	78"	10,300	12,800	16,500	19,000	21,300	23,200	34,500
Maximum	84"	9,100	11,400	14,700	16,900	19,000	21,700	31,900
Ma	90*	8,000	10,200	13,100	15,100	16,900	20,100	29,400
	96"	7,100	9,200	11,800	13,500	15,200	18,600	26,800

HbL = Height between levels

spacing

between

rack

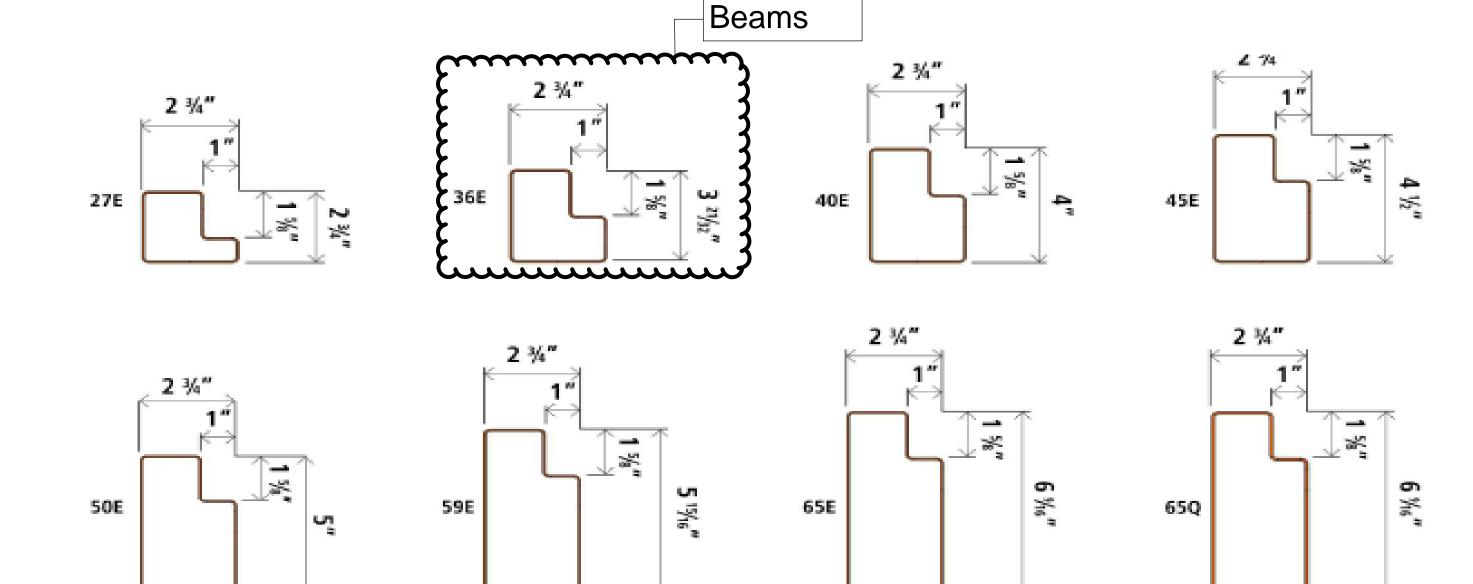
levels

- Capacities are per the 2012 RMI and ANSI MH16, 1 2012 specifications.
- Maximum unsupported height (Height between levels) is the maximum beam spacing or Mecalux. (2) In good condition. (3) Properly installed. the distance between the floor and the top of the first beam (whichever is greater).

Upright Capacity Chart

- · Capacities are only valid when used with Interlake Mecalux published beam sizes.
- Capacities are valid for static load only.

• Frame capacities shown include product load plus dead load (dead load = 2% of product load). • These capacities assume that all component parts are: (1) Manufactured by Interlake



	Beam Capacities (lbs per pair)								
		27E	36E	40E	45E	50E	59E	65E	65Q
	Span	F3	M - 6" 3 Tab End	Plate	F4M - 8" 4 T	ab End Plate	F5M	l - 10" 5 Tab End F	Plate
8' spacing	48"	5,620	8,065	9,450	11,090	12,895	16,870	17,115	27,745
	54"	5,080	7,235	8,470	9,950	11,550	15,110	17,110	24,755
between	60"	4,645	6,575	7,685	9,035	10,470	13,705	15,845	22,365
rack bays	66"	4,285	6,030	7,040	8,285	9,585	12,555	14,500	20,410
	72*	3,985	5,580	6,500	7,660	8,845	11,590	13,375	18,780
	78"	3,505	5,195	6,045	7,130	8,220	10,775	12,425	17,395
	84"	3,075	4,865	5,650	6,675	7,685	10,075	11,610	16,210
	~~~~	2,625	4,490	5,210	6,160	7,075	9,285	10,685	14,870
	96"	2,435	4,165	5,015	5,930	6,810	8,935	10,280	14,285
	102	2,195	3,730	4,475	5,625	6,445	8,465	9,730	13,490
	108"	1,990	3,360	4,030	5,350	6,125	8,050	9,245	12,780
	114"	1,815	3,050	3,650	5,035	5,835	7,670	8,805	12,145
	120"	1,660	2,780	3,320	4,585	5,575	7,335	8,410	11,575
	126"	1,530	2,545	3,040	4,200	5,220	7,025	8,055	11,060
	132"	1,415	2,345	2,795	3,865	4,795	6,585	7,475	10,590
	138"	1,310	2,165	2,575	3,570	4,420	6,070	6,890	10,160
	144"	1,220	2,010	2,385	3,305	4,090	5,620	6,370	9,765
	150"	1,140	1,870	2,220	3,075	3,800	5,220	5,915	9,400
	156"	1,070	1,745	2,065	2,870	3,535	4,865	5,505	9,030
	162"	1,005	1,630	1,930	2,685	3,305	4,545	5,140	8,415
	168"	945	1,530	1,810	2,515	3,095	4,260	4,815	7,860

- Capacities are per the 2012 RMI and 2001 AISI specifications.
- Interlake Mecalux beams over 126"L require bracing to prevent buckling.
   Beams longer than 90" that support decking must be tied together to prevent spreading

bending, or L/180 deflection criteria.

- Loading to be uniformly distributed over the length of the beam.
  Values shown reflect the capacity of the beams based on the lesser of its strength in
- · Load capacities are for uniformly distributed product load plus dead load per pair of beams
- (dead load = weight of beams).

   Capacities are valid for static load only.

   These capacities assume that all component parts are: (1) Manufactured by Interlake Mecalux. (2) In good condition. (3) Properly installed.

Beam Capacity Chart



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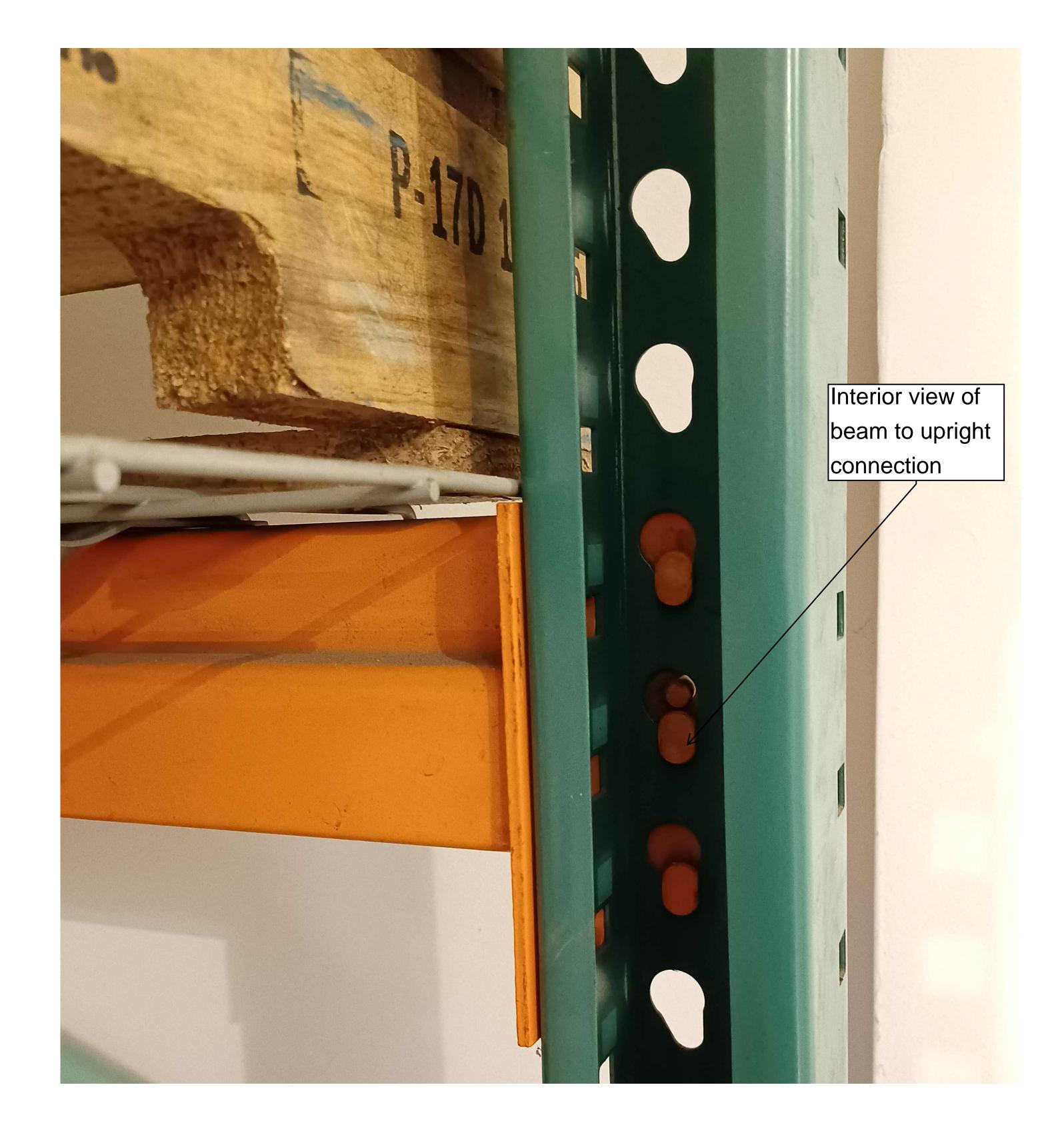
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Beams &
Uprights
Capacity Chart





Beam Connection to Upright



Interior view of beam connection to Upright



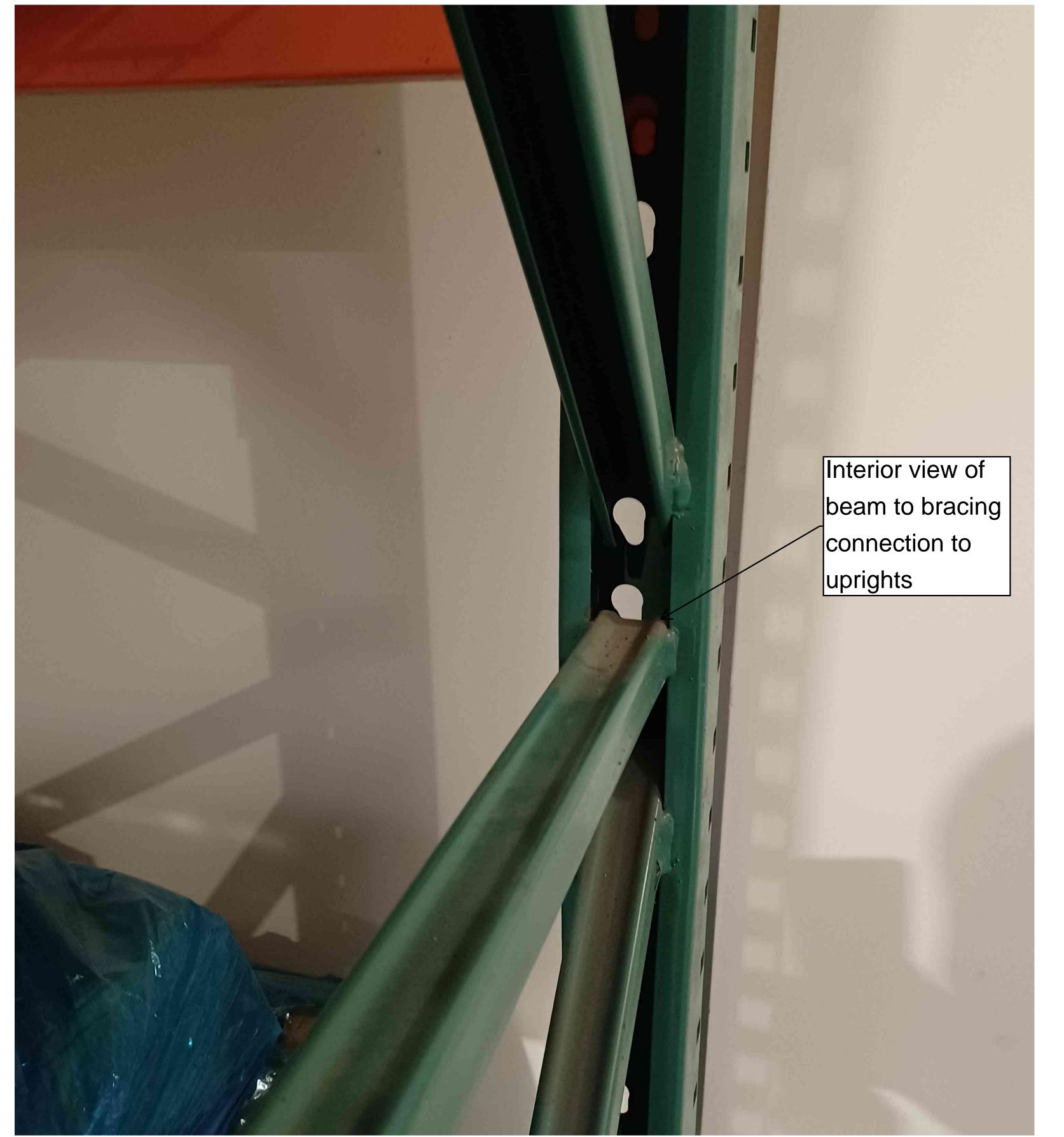
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Beam and Upright Connection

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Warehouse Pallet Racking Relocation and Install

Project Title O1, O2

LONG BEACH

Bracing connection to uprights

Uprights bracing configuration

**ASK-008** 

Upright bracing configuration









2 Bracing sizing



O1, O2
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Bracing details

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Uprights Details









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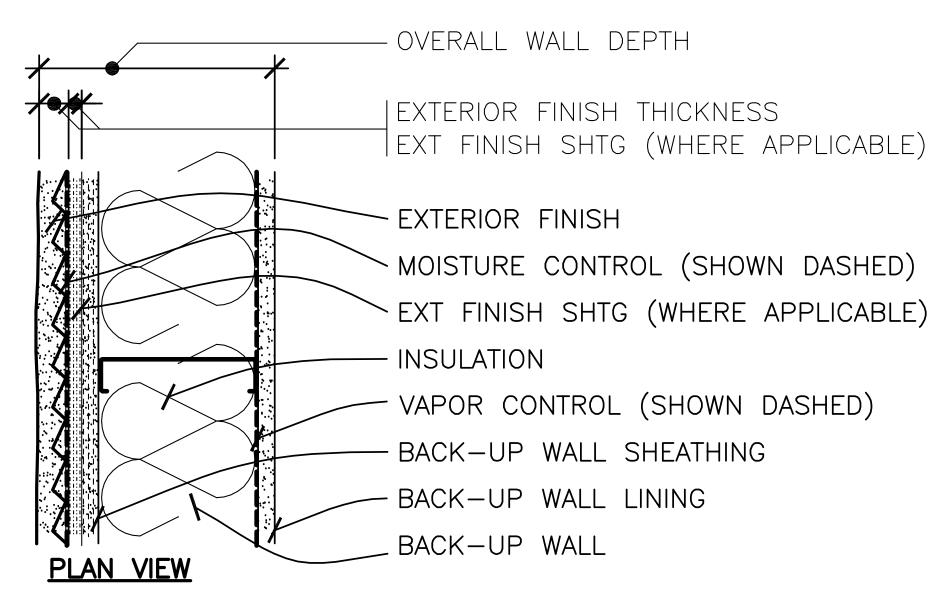
Baseplate Details

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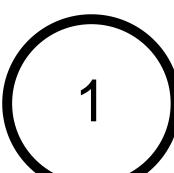
CEMENT PLASTER (ST<u>U</u>CCO) VENEER

STEE**L** STUD BACK-UP WALL (STUD INSUL)



WALL	EXTERIO	OR FI	NISH	MOIST EXT FIN		T FIN INSULATION		VAPOR BACK-UP WALL			WALL NOTE	NIOTEC	
TYPE	MATERIAL	THK	LATH	CONTRL	SHTG	TYPE	THICKNESS	CONTRL	SHTG	STUDS	LINING	l	NOTES
UL1>	PLAS-12	<u>3</u> "	METAL	BP-1	NONE	INSUL-21	6"	(SEE INSUL)	GYP SHTG-2	6" @ 16" OC	GYP BD-1	8"	1,2,4
UL2>	PLAS-12	1"	METAL	AB-1	WD SHTG-2	INSUL-20	6"	VR-1	GYP SHTG-1	6" @ 16" OC	GYP BD-1	9"	1,3,5
UL3	PLAS-12	<u>3</u> "	METAL	BP-1	CEM SHTG-1	INSUL-24	6"	VR-2	GYP SHTG-1	6" @ 16" OC	GYP BD-1	8 <mark>1</mark> "	1,3,5
UL4>													
UL9													
NOTE: WALL TYPES NOT REFERENCED ON DRAWINGS MAY NOT BE REQUIRED ON THIS PROJECT													

- NOTES: 1. SEE ROOM FINISH SCHEDULE & DWGS FOR INTERIOR WALL LINING VARIATIONS, WHERE APPLICABLE.
  - 2. ATTACH LATH TO STL FURG FASTENED OVER MOISTURE CONTROL TO STUDS BEHIND. 3. ATTACH LATH OVER MOISTURE CONTROL THROUGH SHEATHING TO STUDS BEHIND.
  - 4. STUD SIZE & SPACING SHOWN IS MIN REQUIRED & MUST BE VERIFIED BY DESIGN OF SUPPLIER.

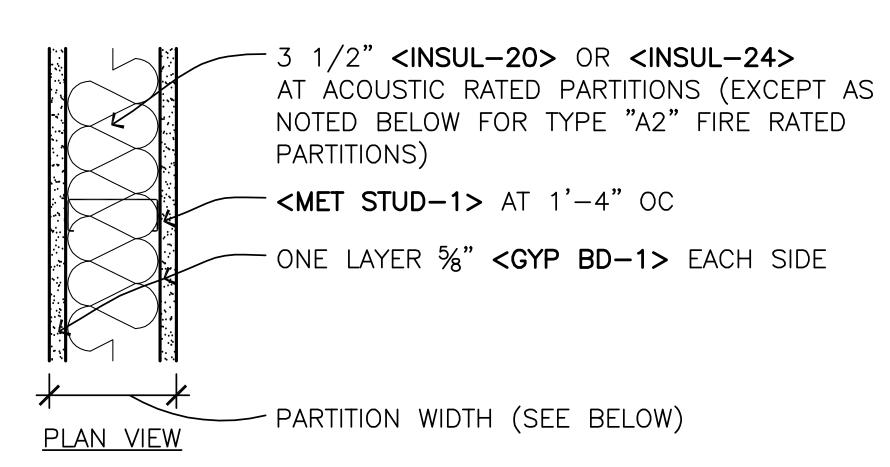


**Exterior Wall Infill** 

A SERIES

NON COMBUSTIBLE

AVAILABLE FIRE RESISTANCE: 1 HOUR



PARTITION TYPE	STUD WIDTH	PARTITION WIDTH	1 HOUR RATING REFERENCE	W/O INSUL	TC W/ INSUL	NOTES	AS DRAWN DIMENSION
A2	2½"	33/4"	UL DES NO U425	40-44	47 EST	1 HR REQD. 2½" MIN OF <b><insul-20></insul-20></b>	3¾"
(A3)	35%"	5"	UL DES NO U465	40-44	45-49	1 HR REQD. 2½" MIN OF <b><insul-20></insul-20></b>	5"
(A6)	6"	71/4"	UL DES NO U465	40-44	45-49		71/4"
(A8)	8"	91/4"	UL DES NO U465	40-44	45-49		91⁄4"

NOTES: UL# U465 (NOTES APPLICABLE AT FIRE RATED PARTITIONS):

- 1. CHANNEL SHAPED RUNNER, MATCH STUD WIDTH, 1¼" LEGS FORMED FROM MIN. NO. 22 MSG GALV STEEL, ATTACHED TO FLOOR AND CEILING WITH FASTENERS SPACED 24" OC MAX.
- 2. STUDS, CHANNEL SHAPED, WIDTH AS INDICATED, 1¼" LEGS, ¾" FOLDED BACK RETURNS, FORMED FROM MIN NO. 22 MSG GALV STEEL, SPACED @ 16" OC.
- 3. GYPSUM BOARD, %" THICK, 4 FOOT WIDE, ATTACHED TO STEEL STUDS AND FLOOR AND CEILING TRACK WITH 1" LONG, TYPE "S" STEEL SCREWS. SPACE 8" OC ALONG EDGES OF BOARD AND 12" OC IN THE FIELD OF THE BOARD. JOINT ORIENTED VERTICALLY AND STAGGERED ON OPPOSITE SIDES OF THE ASSEMBLY.
- 4. VINYL, DRY OR PREMIXED JOINT COMPOUND, APPLIED IN TWO COATS TO JOINTS AND SCREW HEADS; PAPER TAPE, 2" WIDE, EMBEDDED IN FIRST LAYER OF COMPOUND OVER ALL JOINTS.

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Interior Wall Infill Detail



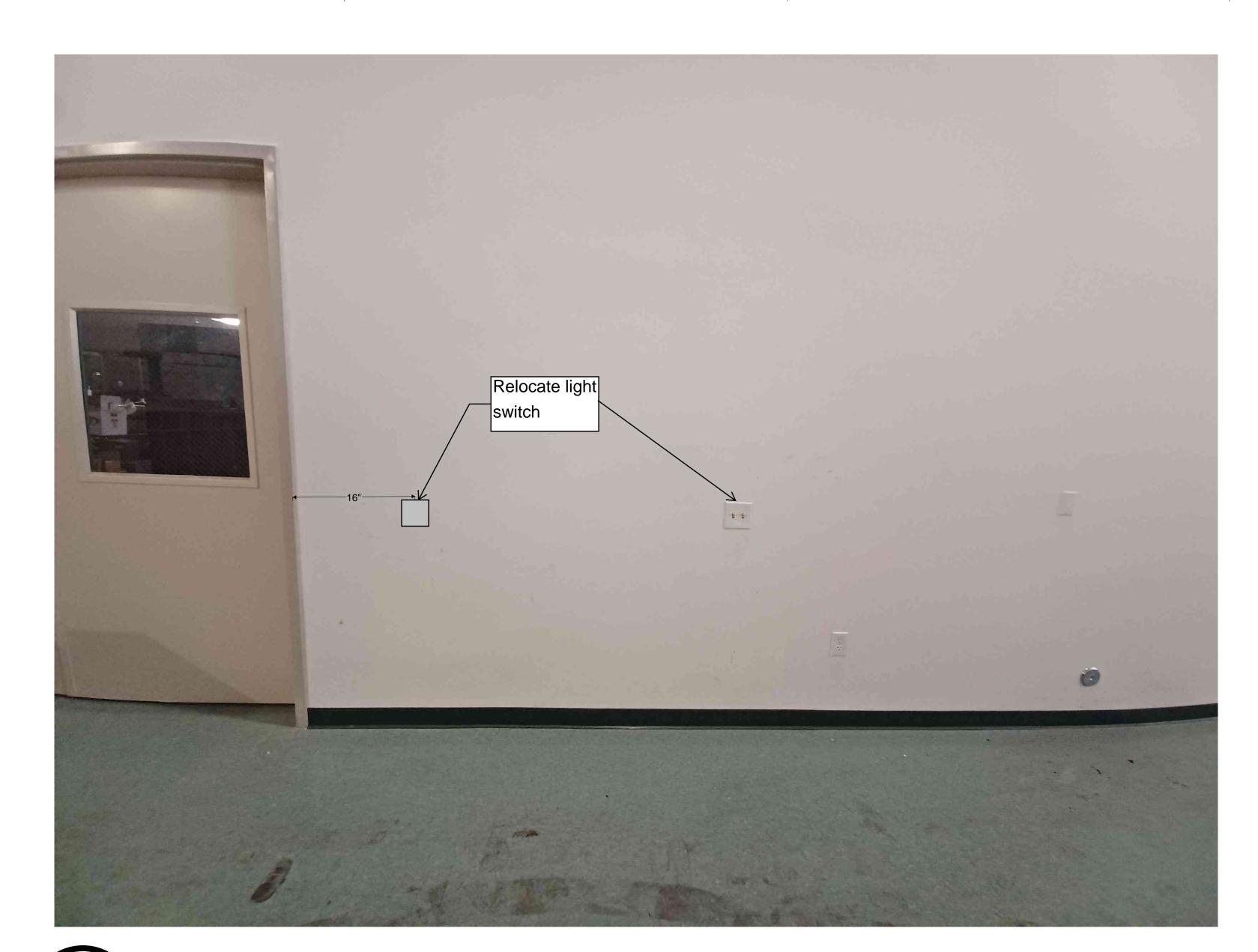
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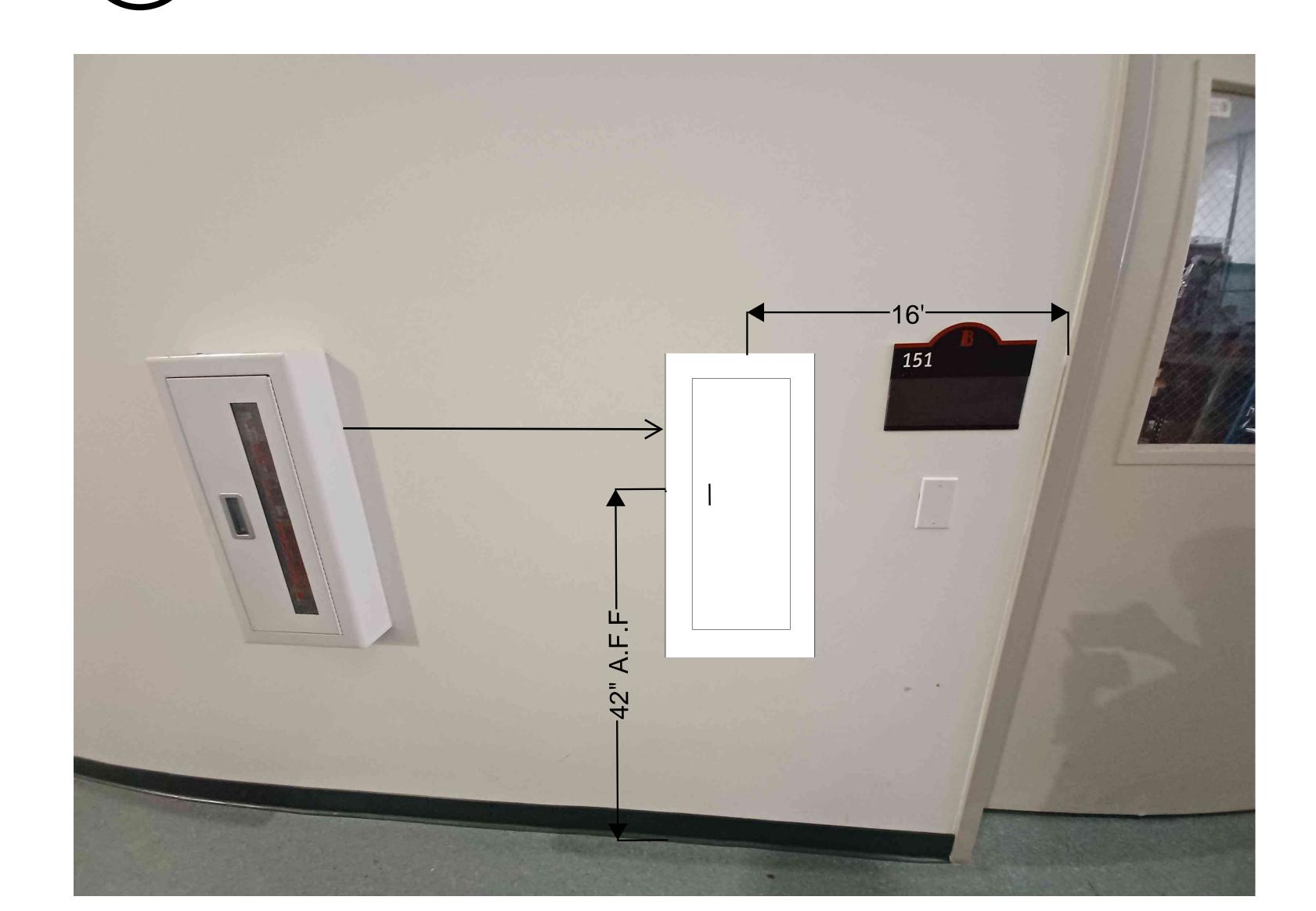
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Wall Infill Details





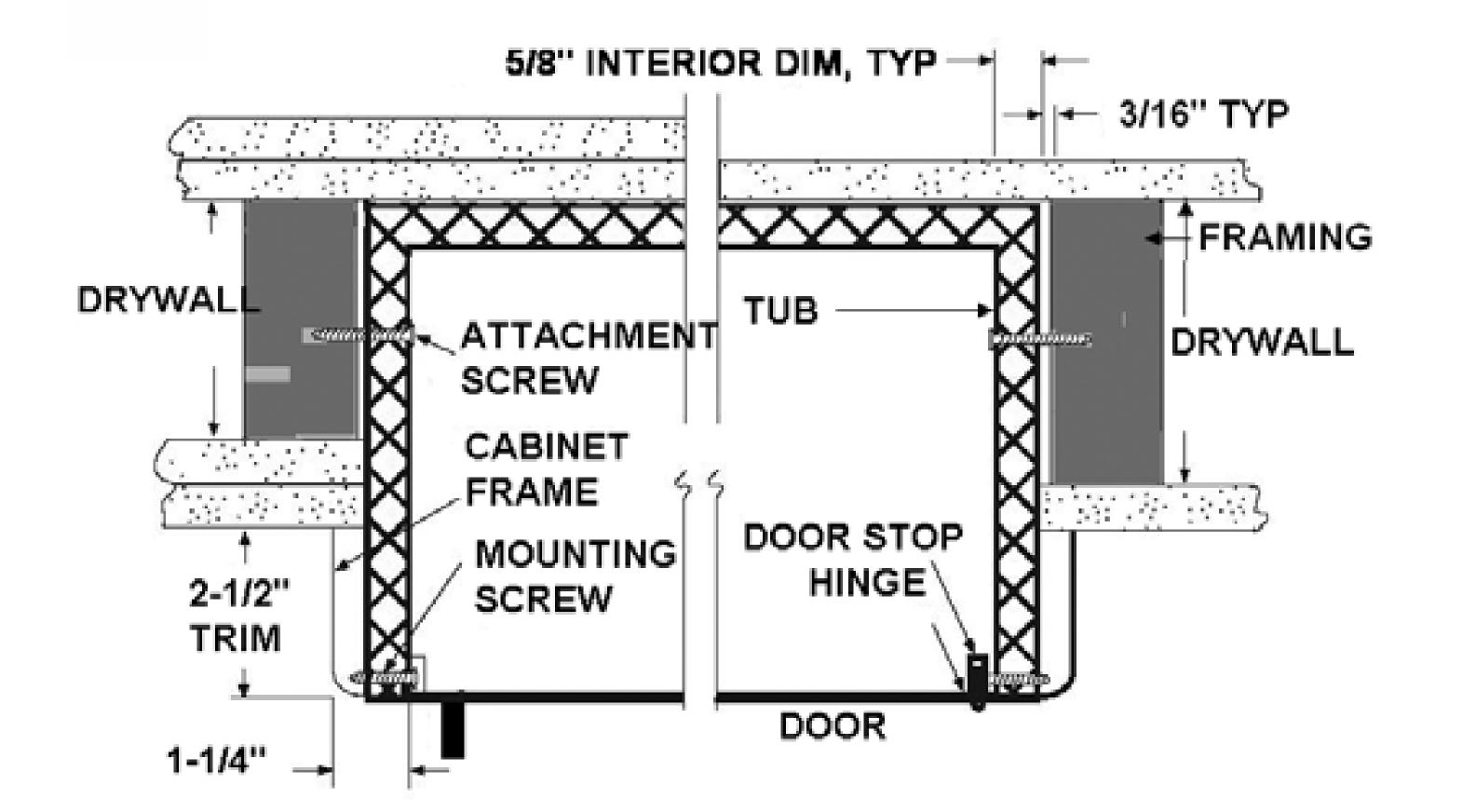
1 Light Switch Relocation



Fire Extinguisher Cabinet 2 Elevation



Fire Extinguisher Cabinet 1 Elevation



Fire Extinguisher Cabinet Mounting Detail



LONG BEACH CITY COLLEGE

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Warehouse Pallet
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Mounting Details

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