

INSTALLATION OF MINI-SPLIT UNITS INTO APPROVED STANDS

GENERAL NOTES:

1- INSTALLATION OF MINI-SPLIT UNITS INTO APPROVED STAND HAVE BEEN VERIFIED IN ACCORDANCE WITH THE 2023 (8th EDITION) OF THE FLORIDA BUILDING CODE. DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM HAVE BEEN DETERMINED IN ACCORDANCE WITH ASCE 7-22 AND SECTIONS 1620.6 & 1616 OF THE 2023 (8th EDITION) OF THE FLORIDA BUILDING CODE. DESIGN BASED ON SITE INFORMATION PROVIDED BY THE CONTRACTOR TO THIS OFFICE.

MAXIMUM ASD DESIGN WIND LOADS: ALLOWED FOR THIS INSTALLATION OF MINISPLIT UNIT. ROOF MOUNTED STANDS:

LOCATION	LATERAL	UPLIFT
ROOF LEVEL	120.0psf.	94.8psf.

2-STAND SHALL BE INSTALLED AS PER APPROVAL DRAWINGS. (MIAMI DADE COUNTY NOA OR FLORIDA APPROVAL). STAND NOT INCLUDED ON THIS DRAWING.

3- VIBRATION ISOLATOR PADS IF APPLICABLE, PER UNIT MANUFACTURER SPECS SHALL BE PROVIDED BY OTHERS BETWEEN UNITS & STAND.

4- ELECTRICAL GROUND , WHEN REQUIRED , TO BE DESIGNED & INSTALLED BY OTHERS. ALL MECHANICAL SPECIFICATIONS (CLEAR SPACE, TONNAGE, ETC.) SHALL BE AS PER MANUFACTURER RECOMMENDATIONS AND ARE THE EXPRESS RESPONSIBILITY OF THE CONTRACTOR.

5- MAXIMUM DIMENSIONS AND WEIGHT OF MECHANICAL UNITS SHALL CONFORM TO SPECIFICATIONS STATED HEREIN, AS LISTED HEREIN. (SEE SHEETS 2 THRU 7) CASES I & II. STRUCTURAL ADEQUACY OF EQUIPMENT IS NOT INCLUDED ON THIS CERTIFICATION.

6- ALL BOLTS SHALL BE AS SPECIFIED ON THIS DRAWING, AND SHALL COMPLY WITH SECTION 2411.3.3.4 OF THE FLORIDA BUILDING CODE.

7- ALL ALUMINUM EXTRUSIONS SHALL BE 6063-T5 ALLOY & TEMPER.

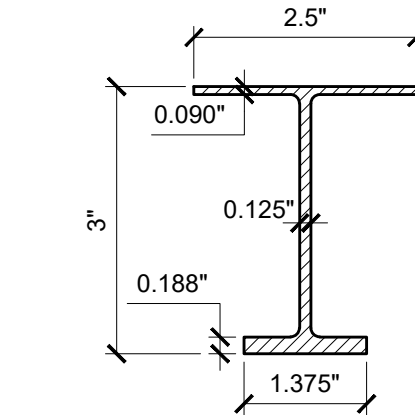
8- MINISPLIT UNITS MAY BE INSTALLED ADJACENT TO OTHER CU'S ON THE SAME STAND BUT STAND SHALL COMPLY WHIT LIMITATIONS INDICATED FOR CASES I & II ON THIS DRAWING.

9- ENGINEER SEAL AFFIXED HERETO VALIDATE STRUCTURAL DESIGN AS SHOWN ONLY. USE OF THIS SPECIFICATION BY CONTRACTOR, et. al. INDEMNIFIES & SAVES HARMLESS THIS ENGINEER FOR ALL COST & DAMAGES INCLUDING LEGAL FEES & APPELLATE FEES RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE & FEDERAL CODES & FROM DEVIATIONS OF THIS PLAN. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED ON THIS DOCUMENT.

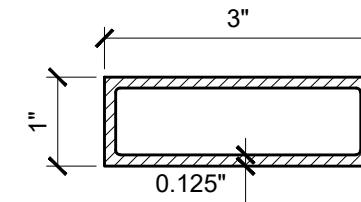
10- THIS ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION SAFETY AT SITE WHICH IS THE CONTRACTOR'S RESPONSIBILITY.

BILL OF MATERIALS: CASES I & II

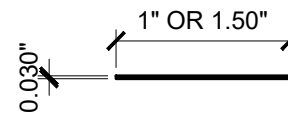
COMP. No.	DESCRIPTION	DIMENSIONS	MATERIALS	NOTES
①	RAIL I-BEAM	2.50"x1.375"x3"	6061-T6 ALLOY	SUPPORT FOR ROOF TOP EQUIPMENT PER NOA OR FL. APPROVAL
②	STRAP	1.00"x0.030"THK. OR 1.50"x0.030"THK.	ASTM A-653 GRADE 33 G-90 GALV. STEEL	FOR Hu≤34"
③	STRAP*	2.00"x0.030"THK.	ASTM A-653 GRADE 33 G-90 GALV. STEEL	FOR Hu≤56"
④	BOLT & THRU BOLT	3/8"Ø-16	ASTM A-307 OR AISI 304 GALV. STEEL	FOR ①, ② & ③
⑤	MINI-SPLIT	34"Dx13"Wx34"H (MAX. DIMENSIONS)	0.035"Min. Fu=58Ksi.	Hu≤34" Wt≤ 150 Lbs.
⑥	MINI-SPLIT	34"Dx13"x56"H (MAX. DIMENSIONS)	0.035"Min. Fu=58Ksi.	Hu≤56" Wt≤ 300 Lbs.
⑦	TRANSVERSE TUBE	3"x1"x1/8"THK.	6063-T5 ALLOY	SUPPORT FOR ROOF TOP EQUIPMENT (CASE II ONLY)



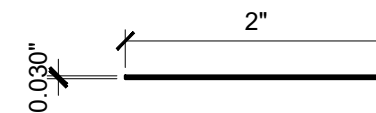
① RAIL (I-BEAM)



⑦ TRANSVERSE TUBE (CASE II ONLY)



② STRAP



③ STRAP*

*NOTE: 2" WIDE STRAP ③ CAN BE ALSO ACHIEVED BY USING ② 1" OR 1.50" WIDE STRAP ② NEXT TO EACH OTHER.

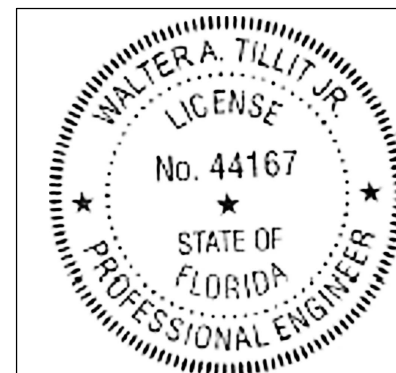
FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

F.R.L. DRAWN BY:	11/12/24	DATE:	24-131	DRAWING No.	SHEET 1 OF 7
INSTALLATION OF MINI-SPLIT UNITS INTO APPROVED STANDS					
F & L ALUMINUM PARTS, INC.					
2087 N. POWERLINE RD. SUITE #1					
POMPANO BEACH, FL. 33069					
REV. NO	DESCRIPTION	DATE	REV. No	DATE	REV. No
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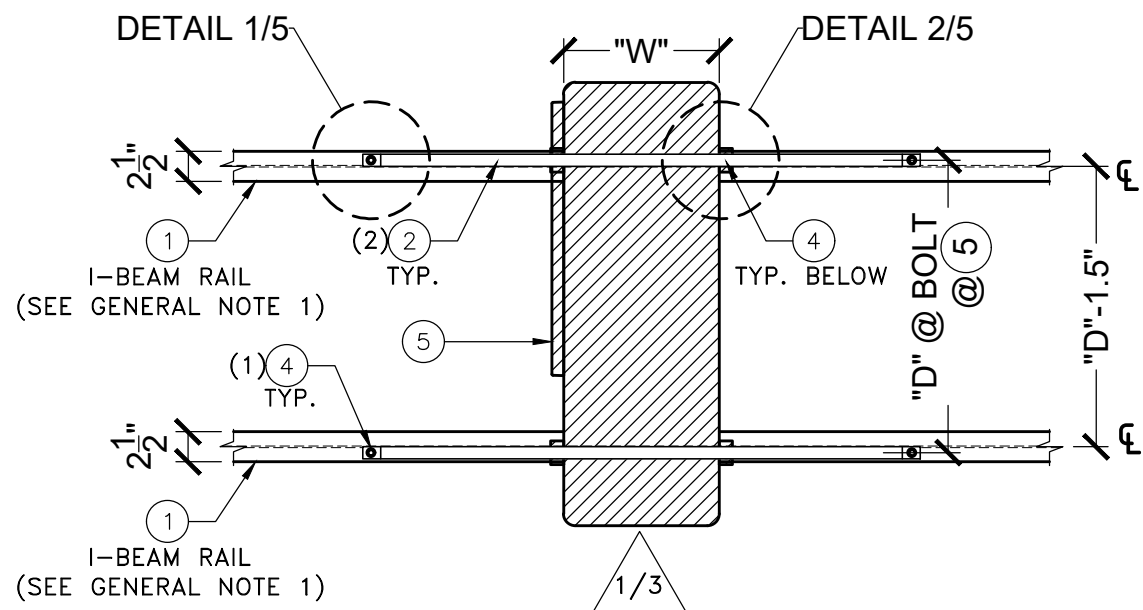
TILTECO INC.

TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL. 33166
Phone : (305)871-1530 . Fax : (305)871-1531
CA-0006719
WALTER A. TILLIT JR., P.E.
FLORIDA Lic. # 44167

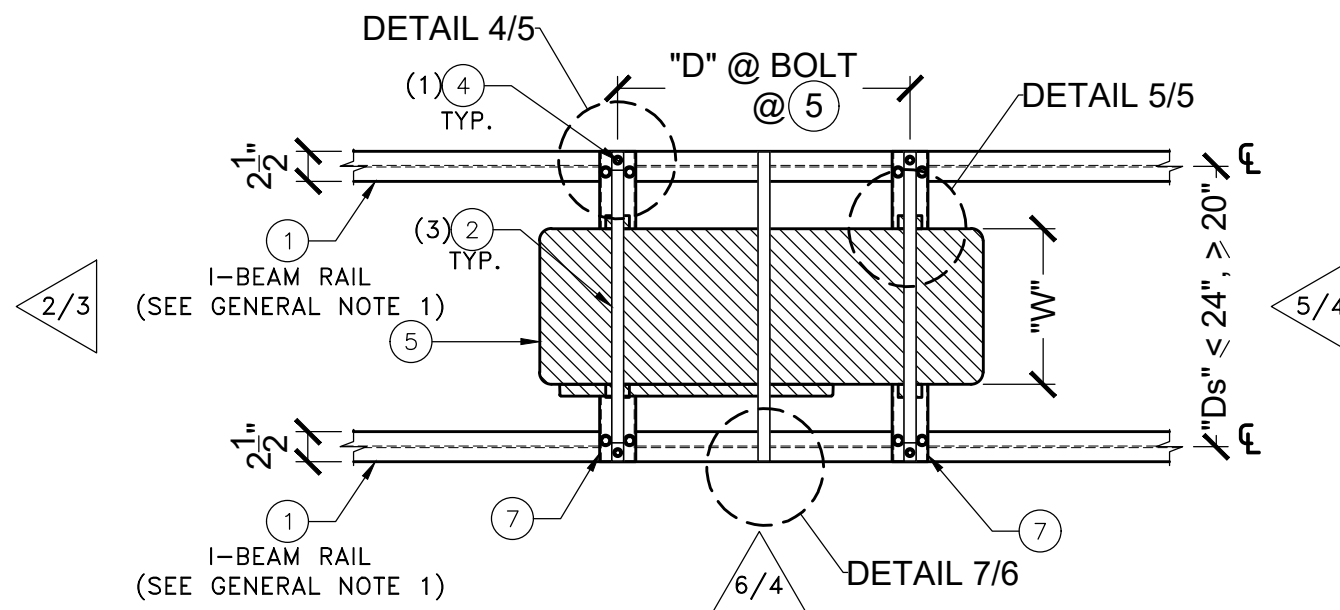


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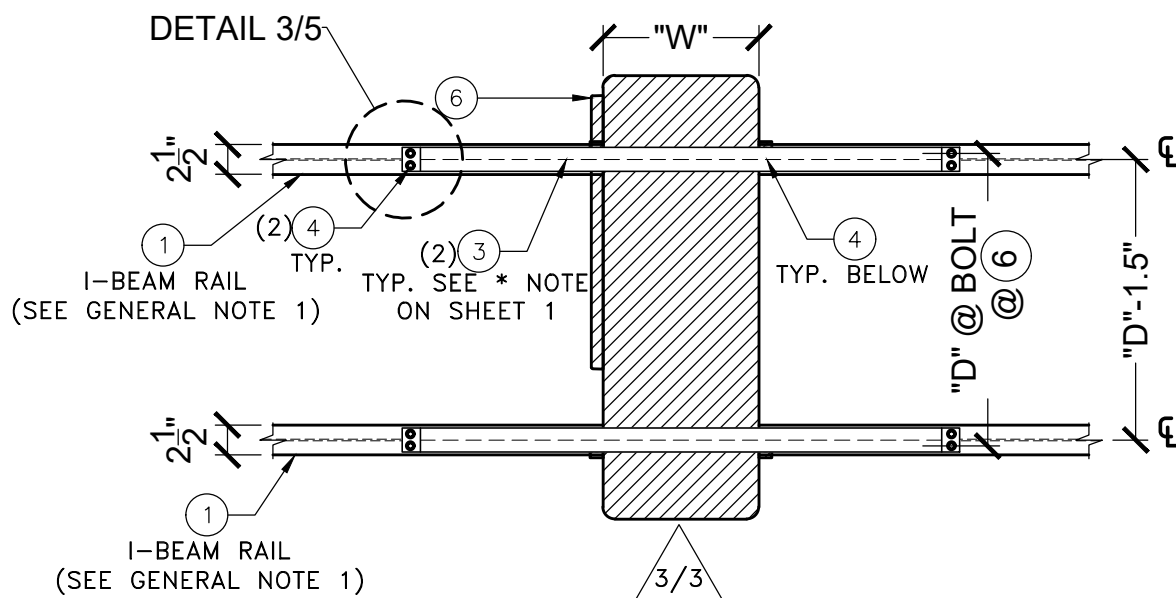
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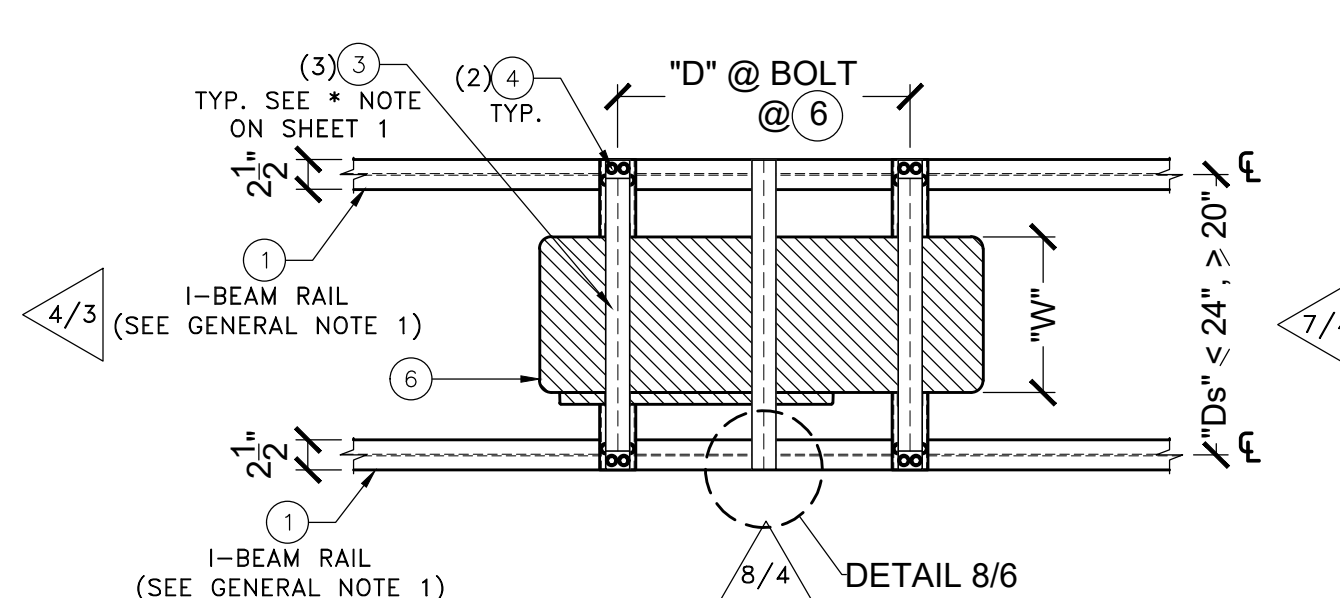
TYP. PLAN VIEW FOR MINI-SPLIT CASE I $H_u < 34''$ STAND
 $3/4'' = 0'-1''$



TYP. PLAN VIEW FOR MINI-SPLIT CASE II $H_u < 34''$ STAND
 $3/4'' = 0'-1''$



TYP. PLAN VIEW FOR MINI-SPLIT CASE I
 $H_u \leq 56''$, $H_u > 34''$ STAND
 $3/4'' = 0'-1''$



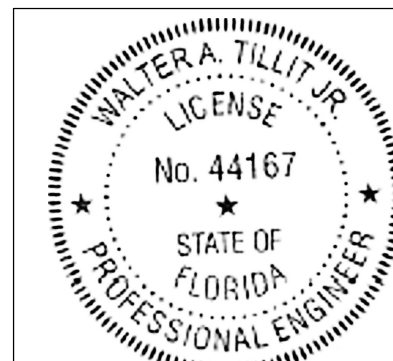
TYP. PLAN VIEW FOR MINI-SPLIT CASE II
 $H_u \leq 56''$, $H_u > 34''$ STAND
 $3/4'' = 0'-1''$

CASE I NOTES: MINI-SPLIT "W" INSTALLED PARALLEL TO STAND RAILS.

- 1- STAND'S RAIL SPACING MUST BE $D-1.5''$ WHERE D =MINISPLIT ON CENTERS DISTANCE BETWEEN SUPPORTING LEGS.
- 2- MINISPLIT LEGS TO BE BOLTED TO STAND LEGS W/ (4) EACH LEG.
- 3- (2) STRAPS (2) OR (3) MUST BE USED DEPENDING ON H_u BOLTED TO RAIL W/ (4) EACH END.

CASE II NOTES: MINI-SPLIT "W" INSTALLED PERPENDICULAR TO STAND RAILS.

- 1- TRANSVERSE TUBE (7) ON CENTERS SPACING MUST COINCIDE W/ MINISPLIT LEGS LOCATION.
- 2- TRANSVERSE TUBE (7) MUST BE CONNECTED TO RAIL W/ (2) (4) EACH END.
- 3- MINISPLIT LEGS MUST BE CONNECTED TO (7) W/ (4) EACH LEG.
- 4- (2) STRAPS (2) OR (3) DEPENDING ON H_u MUST BE USED BOLTED TO (7) W/ (2) (4) EACH END.
- 5- INSTALLATION ONLY VALID FOR STANDS $W/ D_s \leq 24''$, $\geq 20''$.



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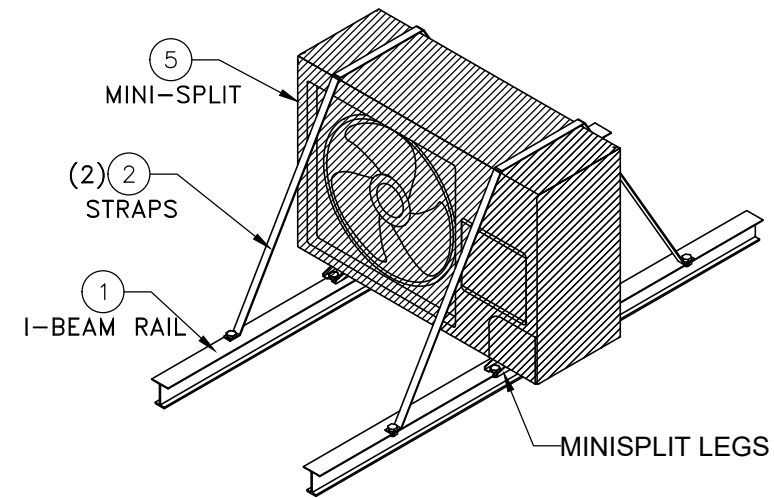
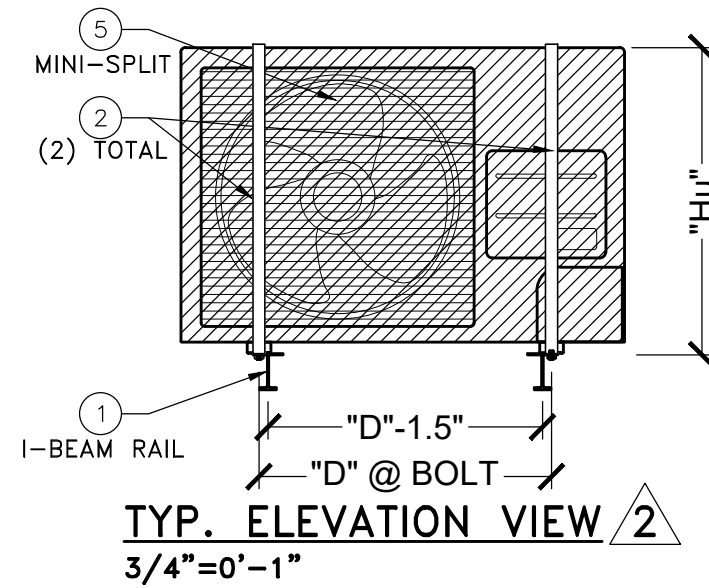
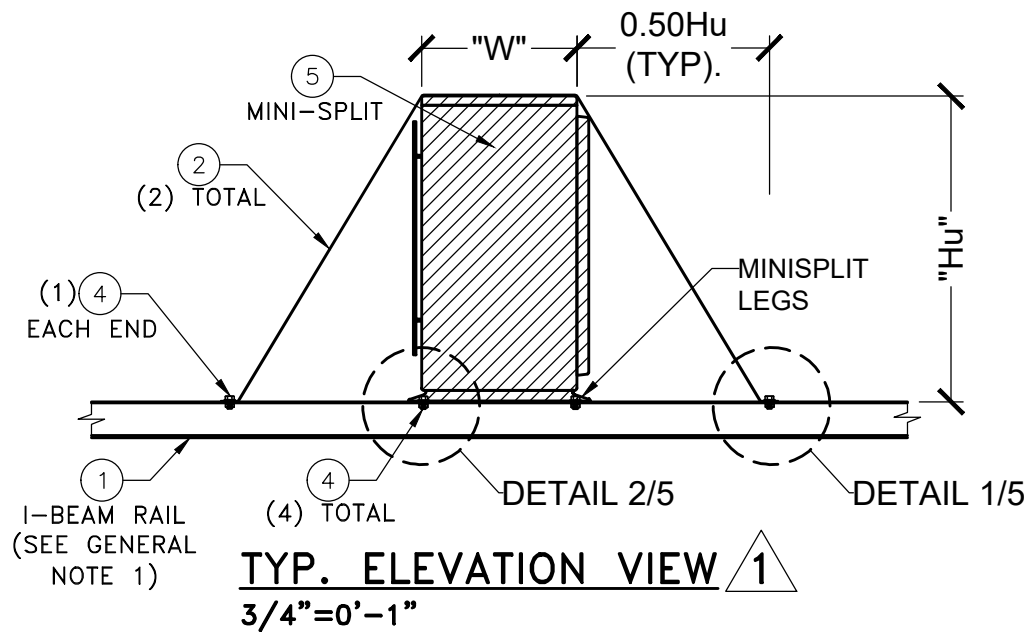
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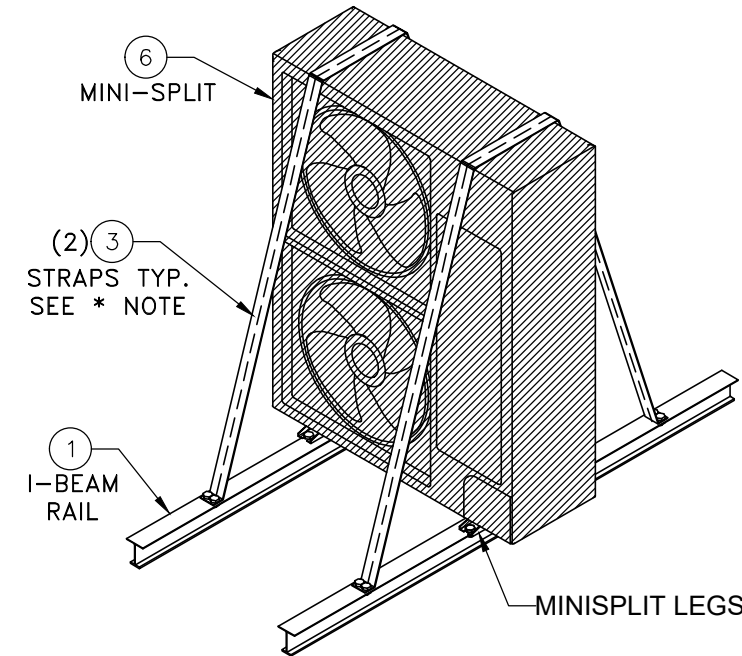
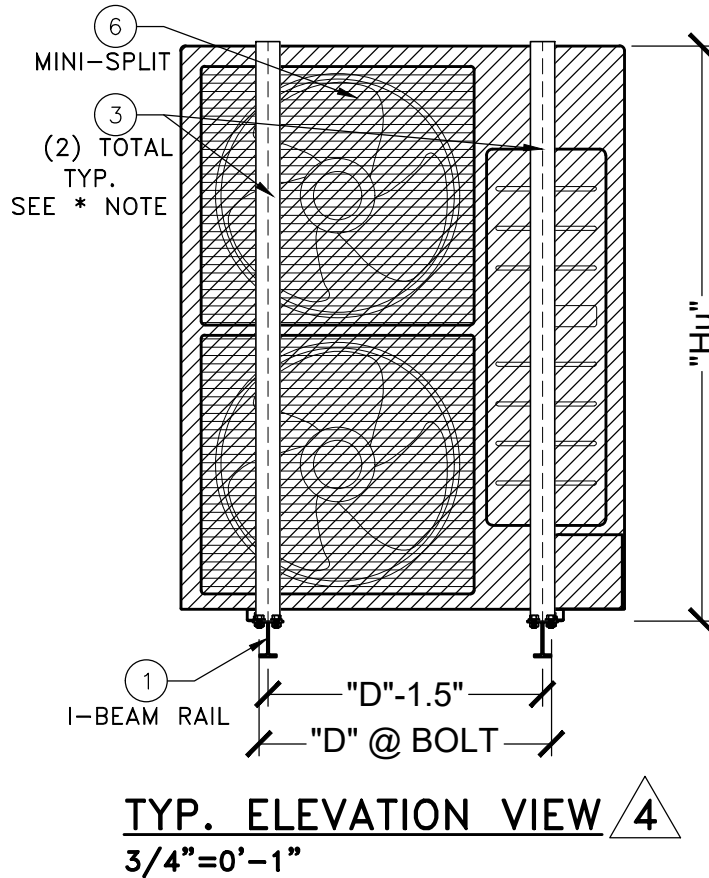
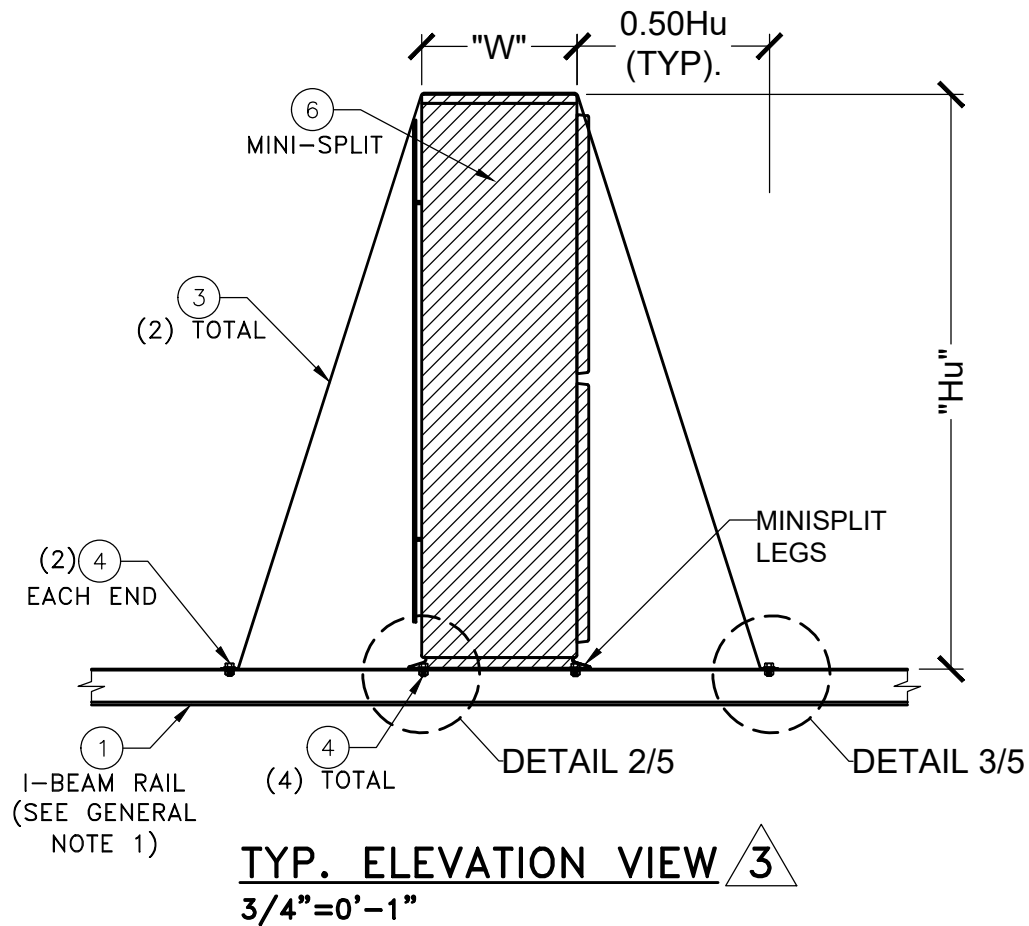
F.R.L. DRAWN BY:	11/12/24	DATE:	24-131	DRAWING No.	SHEET 2 OF 7
INSTALLATION OF MINI-SPLIT UNITS INTO APPROVED STANDS			F & L ALUMINUM PARTS, INC. 2087 N. POWERLINE RD. SUITE #1 POMPANO BEACH, FL. 33069		
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 CA-0006719
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ISOMETRIC VIEW $H_u \leq 34"$
N.T.S



ISOMETRIC VIEW $H_u \leq 56"$,
 $H_u > 34"$ STAND
N.T.S

**CASE I: MINISPLIT "W" INSTALLED
PARALLEL TO STAND RAIL**

*NOTE: 2" WIDE STRAP (3) CAN BE ALSO ACHIEVED BY USING (2) 1" OR 1.50" WIDE STRAP (2) NEXT TO EACH OTHER.

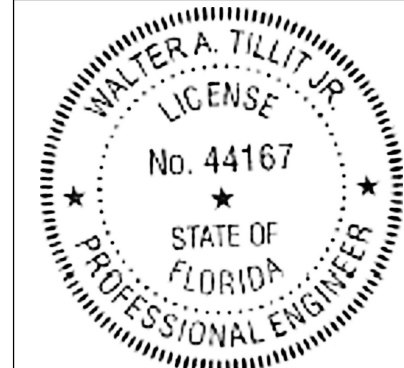
D	DISTANCE BETWEEN UNIT BOLT AT LEGS BY MANUFACTURER SPECS
D-1.5"	DISTANCE BETWEEN I-BEAM RAIL AT STAND
Hu	UNIT HEIGHT BY MANUFACTURER SPECS
W	UNIT WIDTH BY MANUFACTURER SPECS

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

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INSTALLATION OF MINI-SPLIT UNITS INTO APPROVED STANDS	F & L ALUMINUM PARTS, INC. 2087 N. POWERLINE RD. SUITE #1 POMPANO BEACH, FL. 33069				
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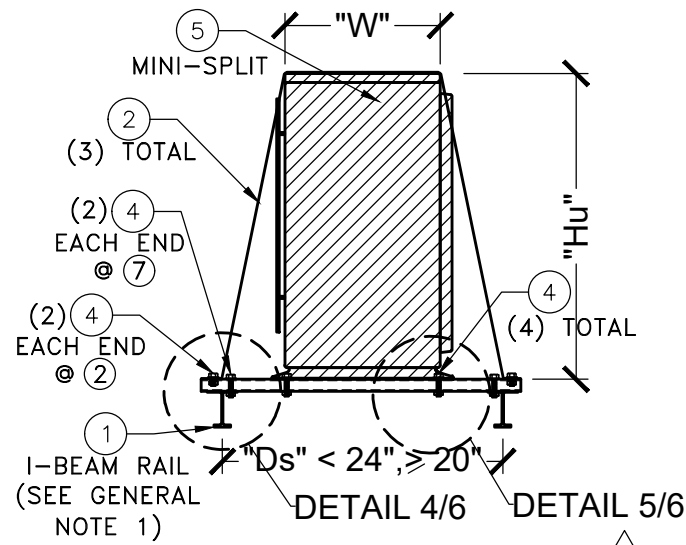
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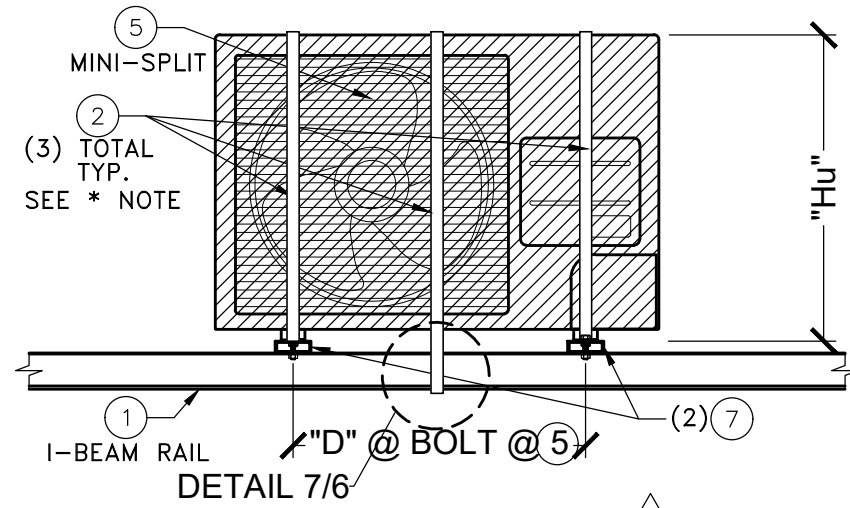


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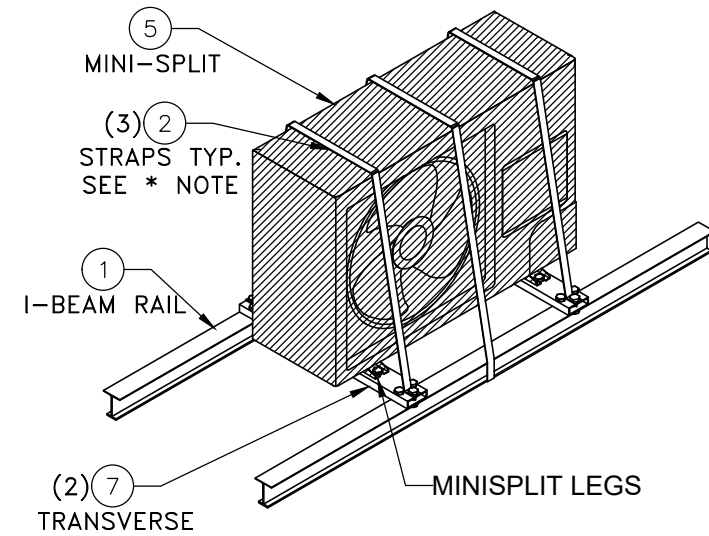
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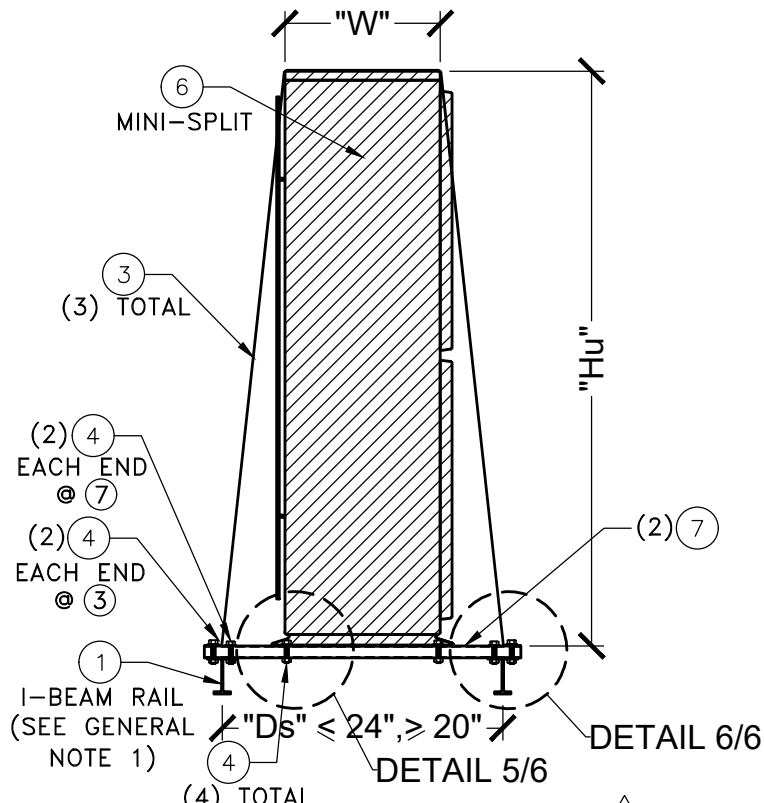
TYP. ELEVATION VIEW 5
3/4"=0'-1"



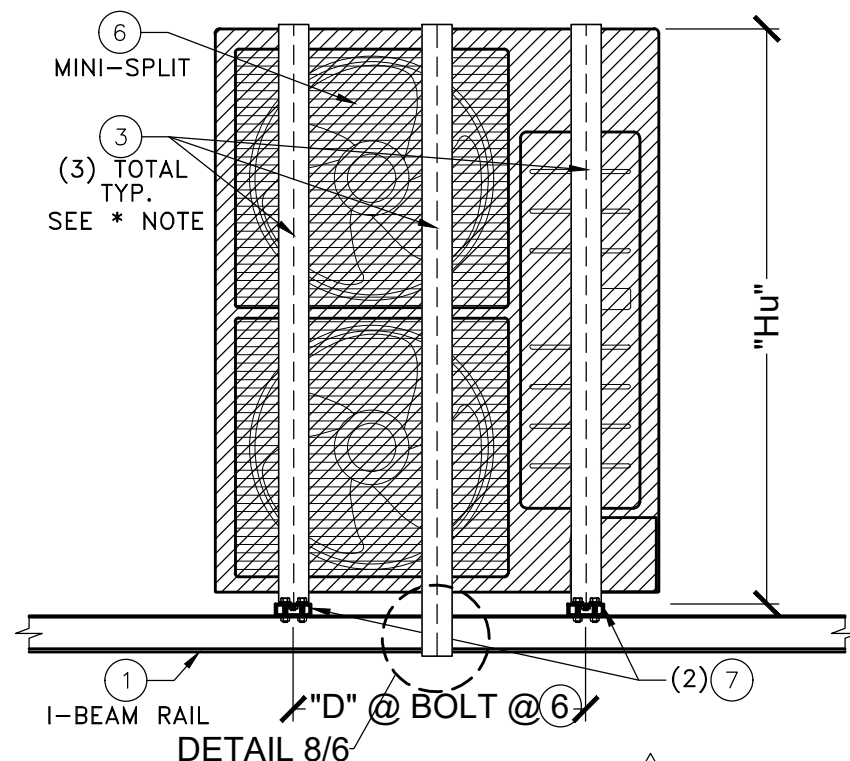
TYP. ELEVATION VIEW 6
3/4"=0'-1"



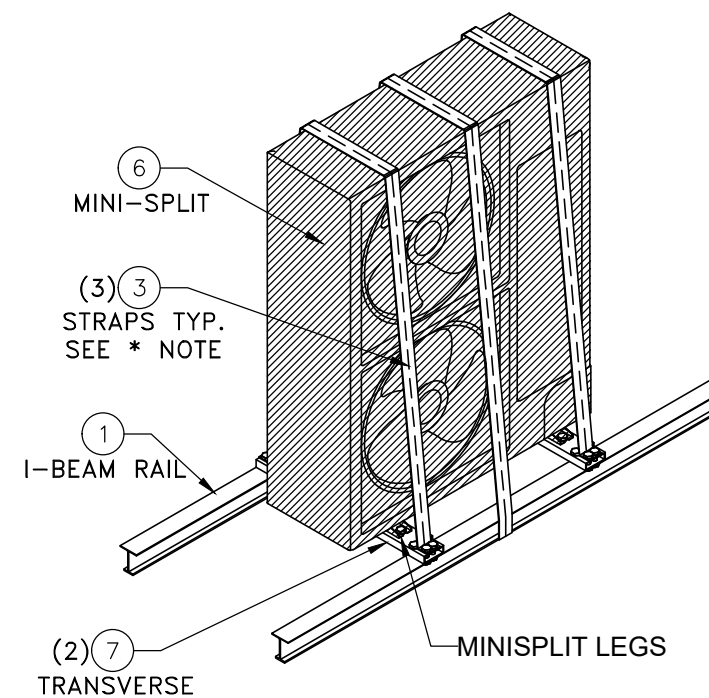
ISOMETRIC VIEW Hu ≤ 34"
N.T.S



TYP. ELEVATION VIEW 7
3/4"=0'-1"



TYP. ELEVATION VIEW 8
3/4"=0'-1"

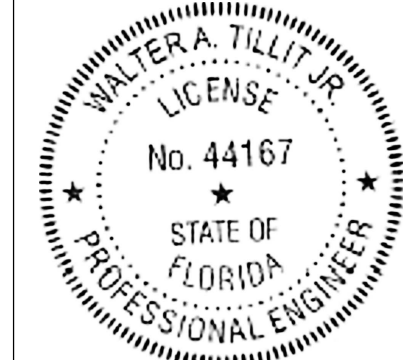


ISOMETRIC VIEW Hu ≤ 56"
N.T.S

CASE II: MINISPLIT "W" INSTALLED PERPENDICULAR TO STAND RAIL

D	DISTANCE BETWEEN UNIT BOLT AT LEGS BY MANUFACTURER SPECS
Hu	UNIT HEIGHT BY MANUFACTURER SPECS
W	UNIT WIDTH BY MANUFACTURER SPECS
Ds	STAND DEPTH

*NOTE: 2" WIDE STRAP (3) CAN BE ALSO ACHIEVED BY USING (2) 1" OR 1.50" WIDE STRAP (2) NEXT TO EACH OTHER.



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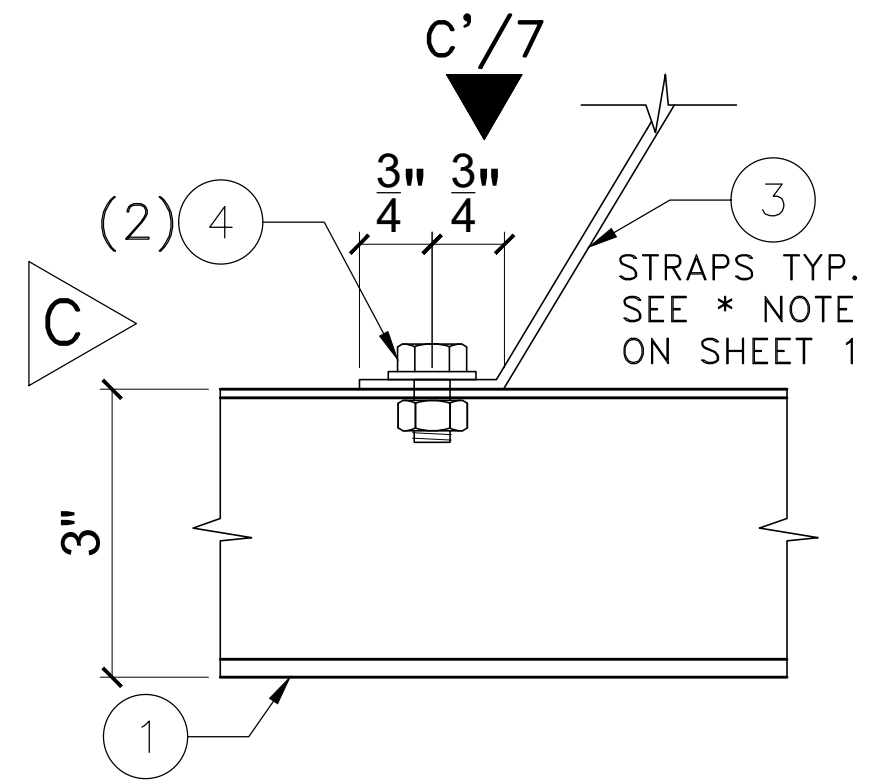
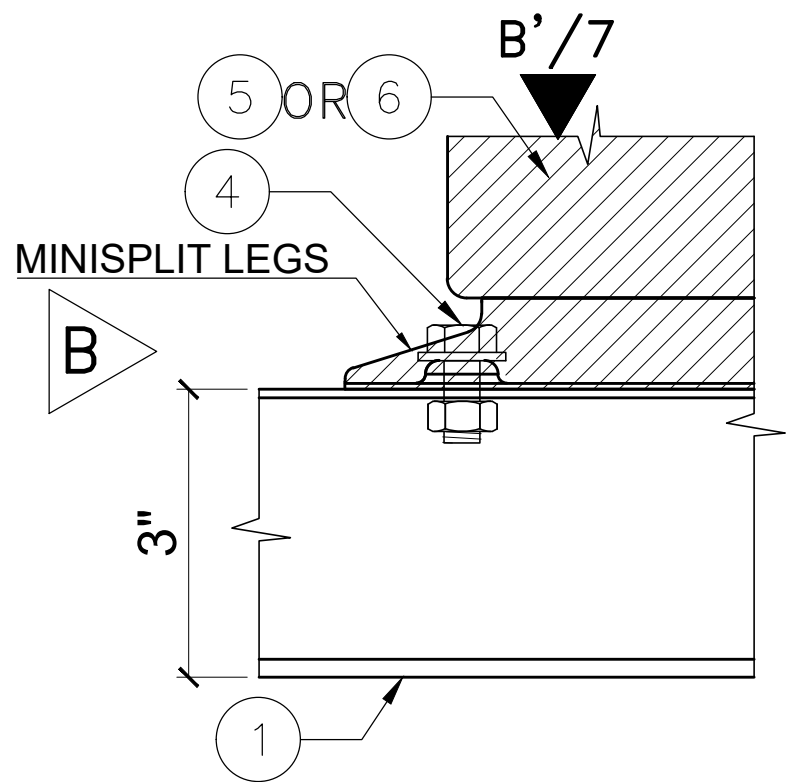
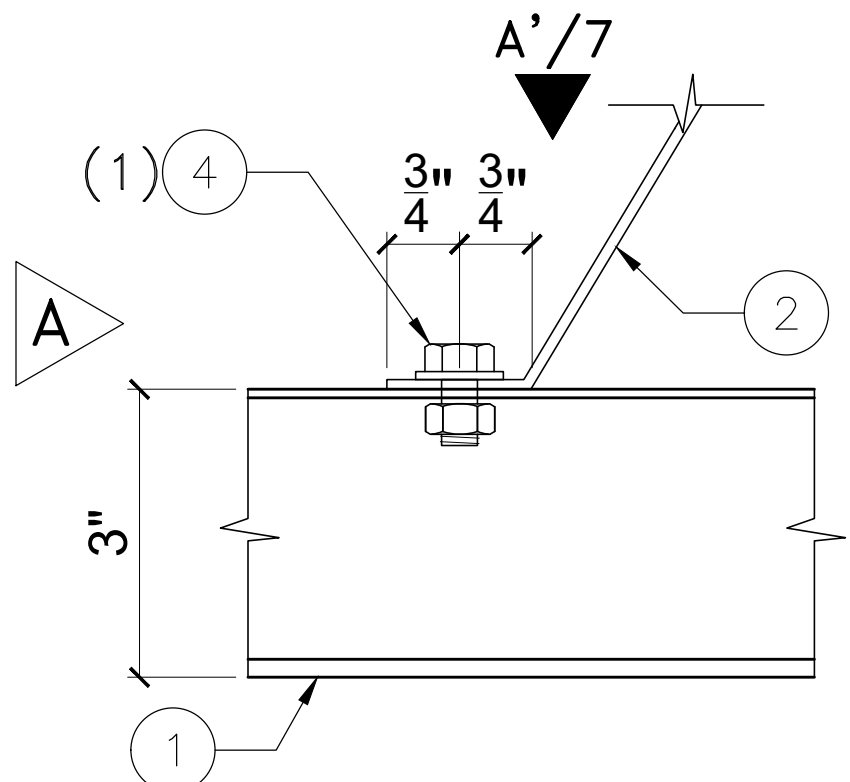
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INSTALLATION OF MINI-SPLIT UNITS INTO APPROVED STANDS

F & L ALUMINUM PARTS, INC.
2087 N. POWERLINE RD. SUITE #1
POMPANO BEACH, FL. 33069

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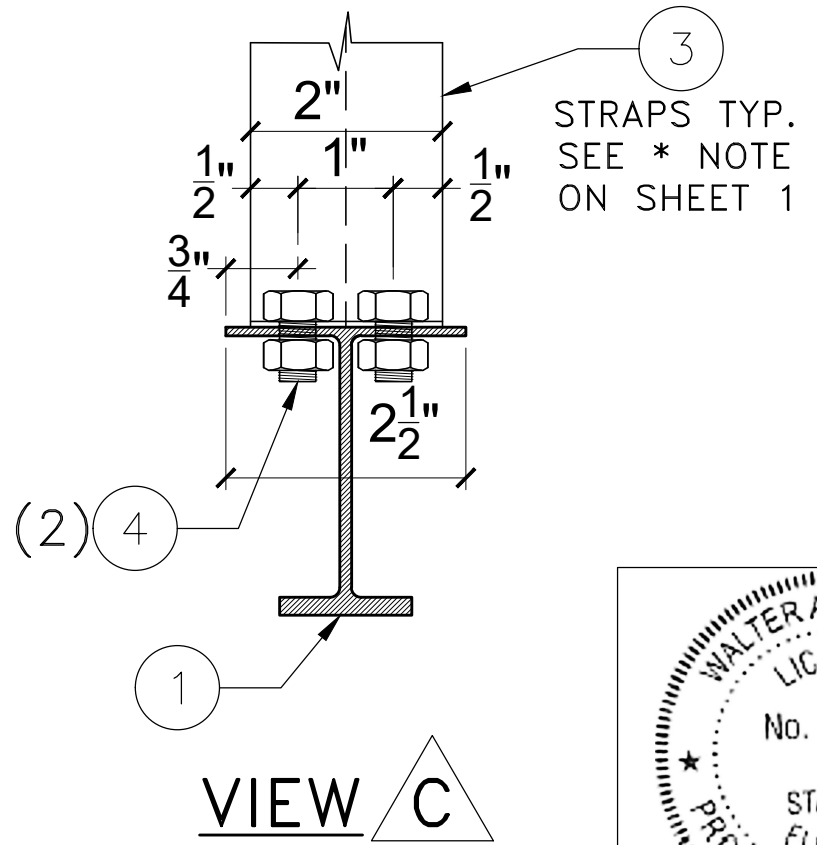
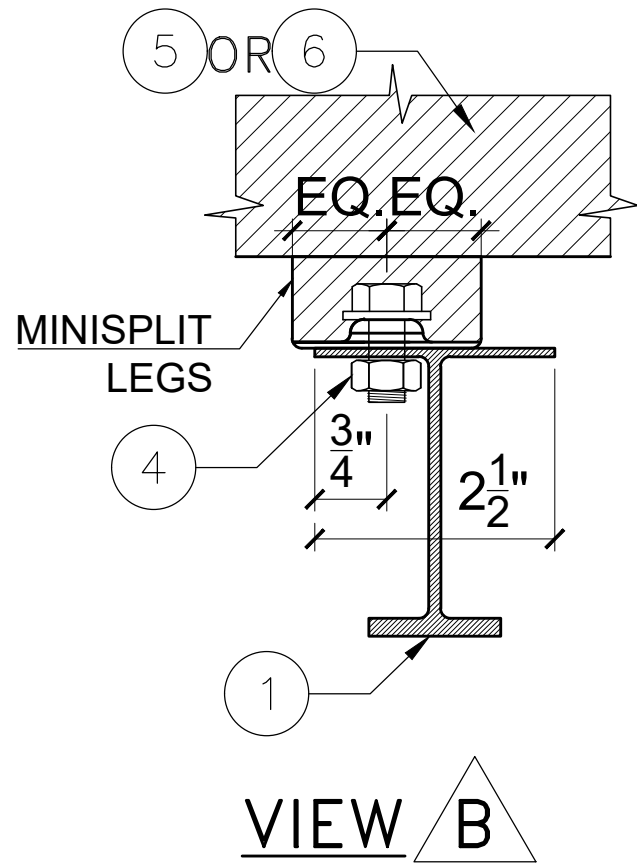
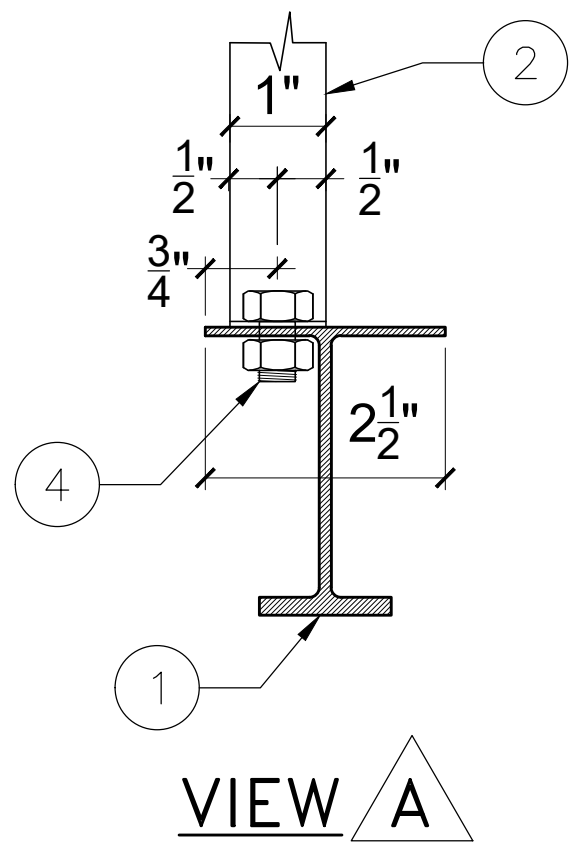
F.R.L. DRAWN BY: 11/12/24 DATE: 24-131 DRAWING No. SHEET 4 OF 7



DETAIL 1: CASE I
($H_u \leq 34''$)
 $1/2'' = 0'-1''$

DETAIL 2: CASE I
($H_u \leq 56''$)
 $1/2'' = 0'-1''$

DETAIL 3: CASE I
($H_u \leq 56''$, $H_u > 34''$)
 $1/2'' = 0'-1''$



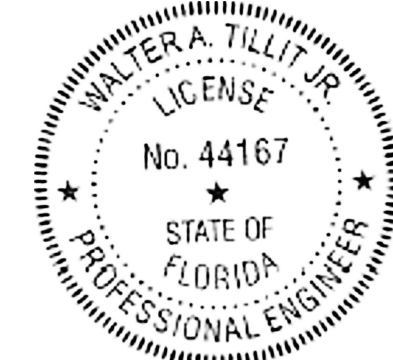
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DATE:		24-131	
DRAWING No.		DRAWING No.	
SHEET 5 of 7		SHEET 5 of 7	
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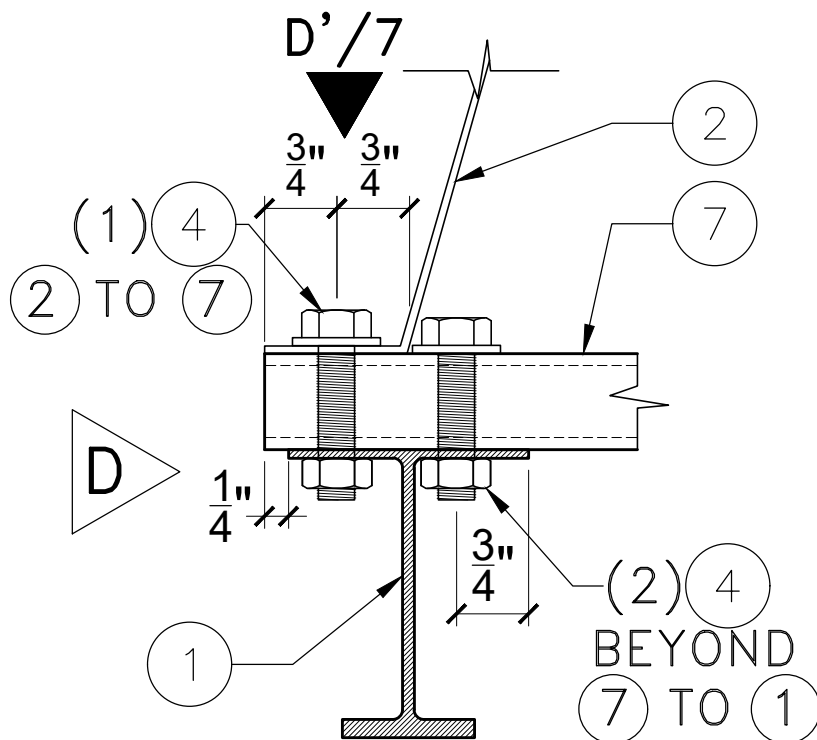
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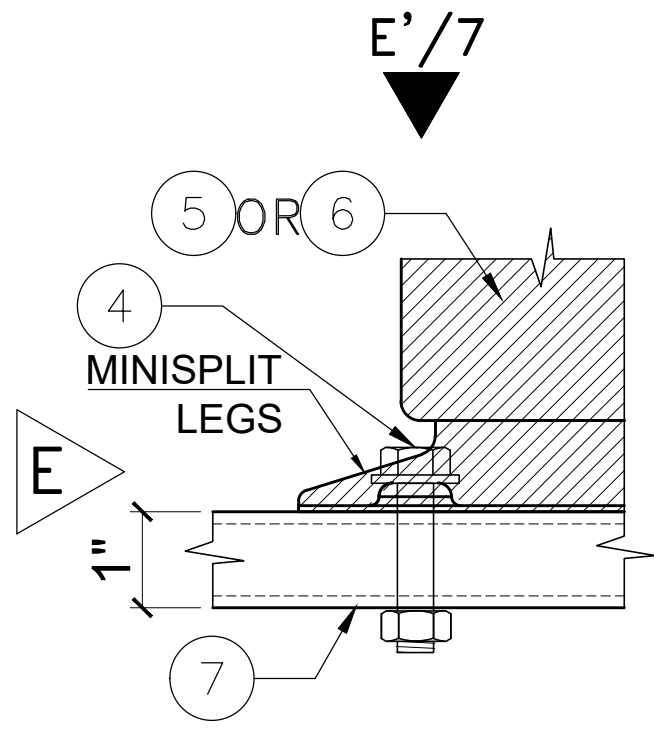


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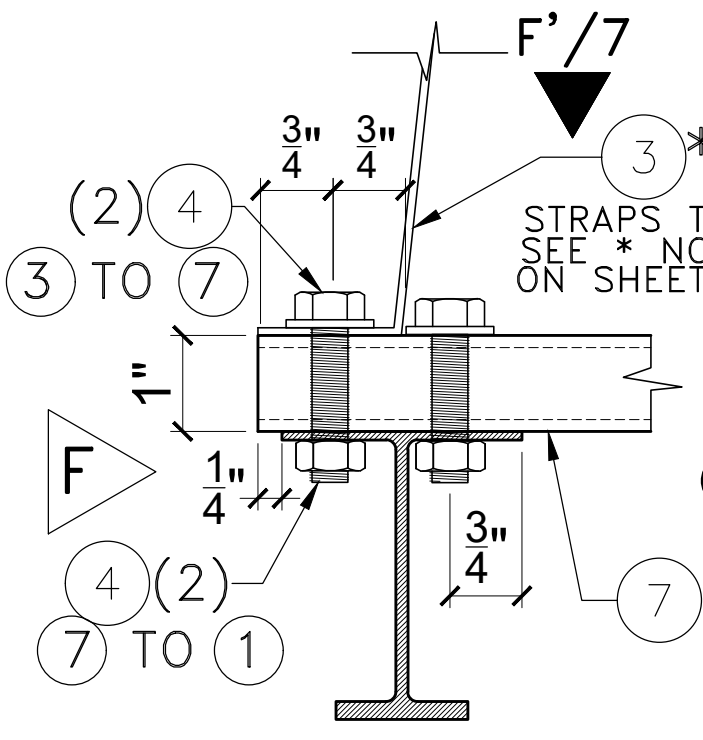
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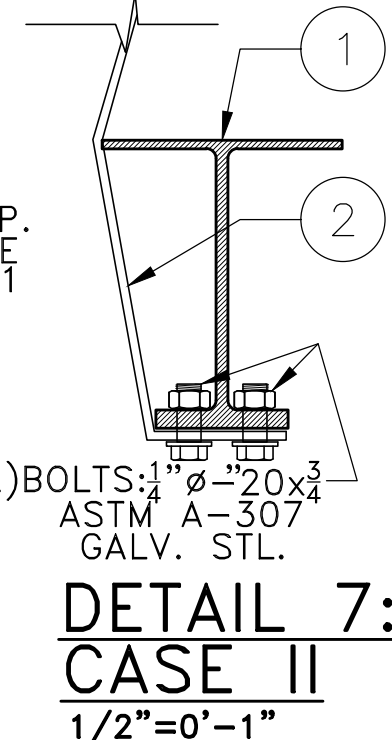
DETAIL 4: CASE II
 ($H_u < 34''$)
 1/2"=0'-1"



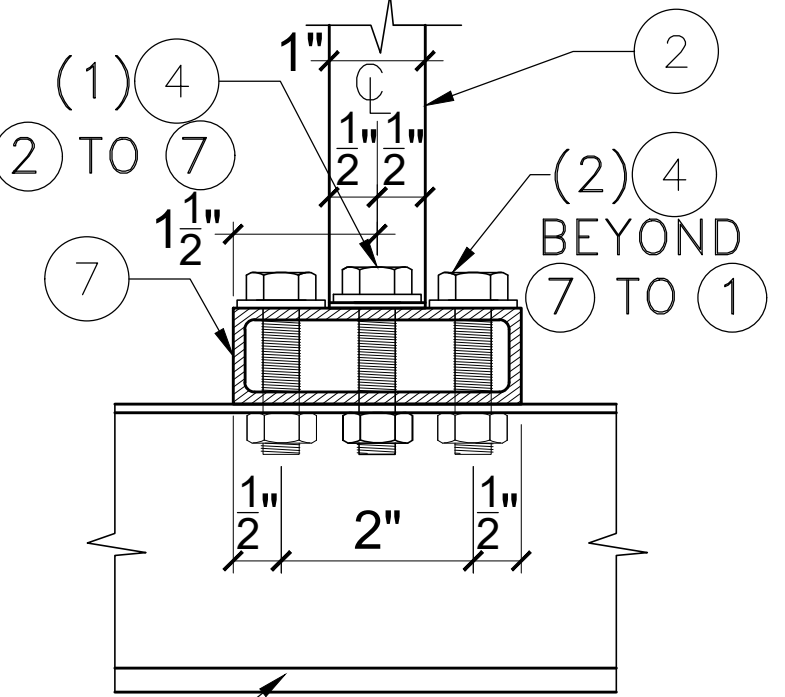
DETAIL 5: CASE II
 ($H_u < 56''$)
 1/2"=0'-1"



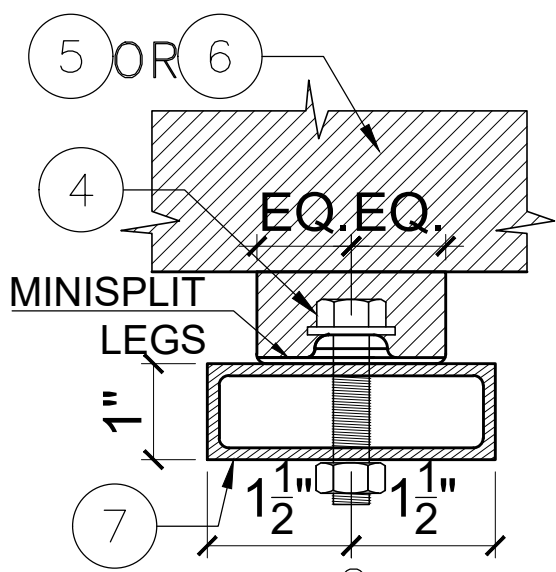
DETAIL 6: CASE II
 ($H_u < 56''$, $H_u > 34''$)
 1/2"=0'-1"



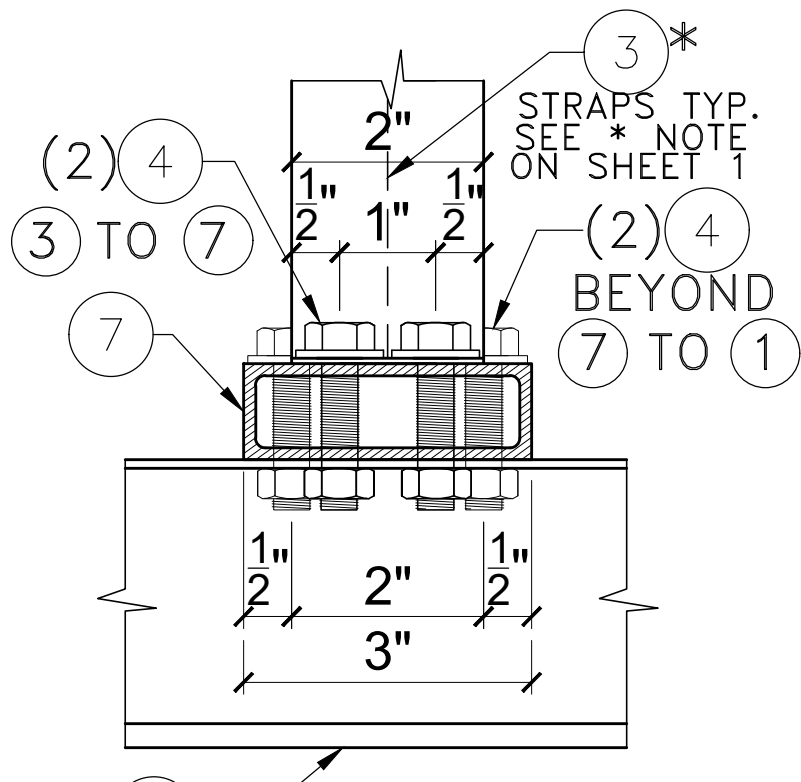
DETAIL 7: CASE II
 1/2"=0'-1"



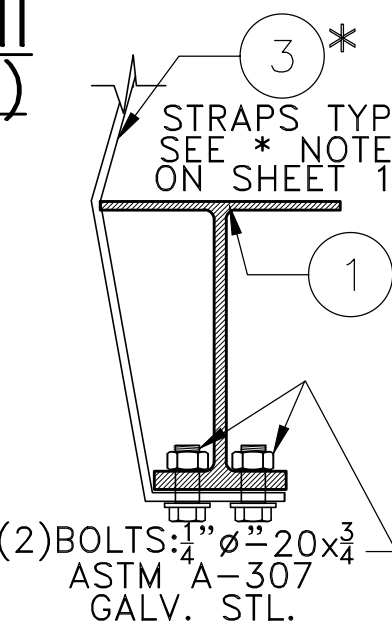
VIEW D



VIEW E



VIEW F



DETAIL 8: CASE II
 1/2"=0'-1"

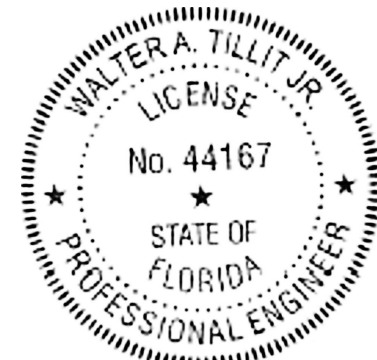
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2			4		

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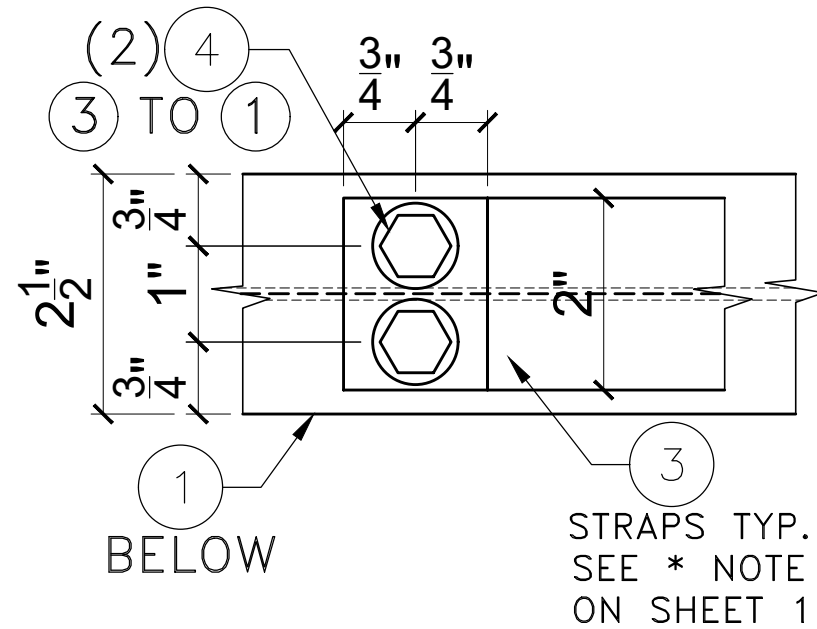
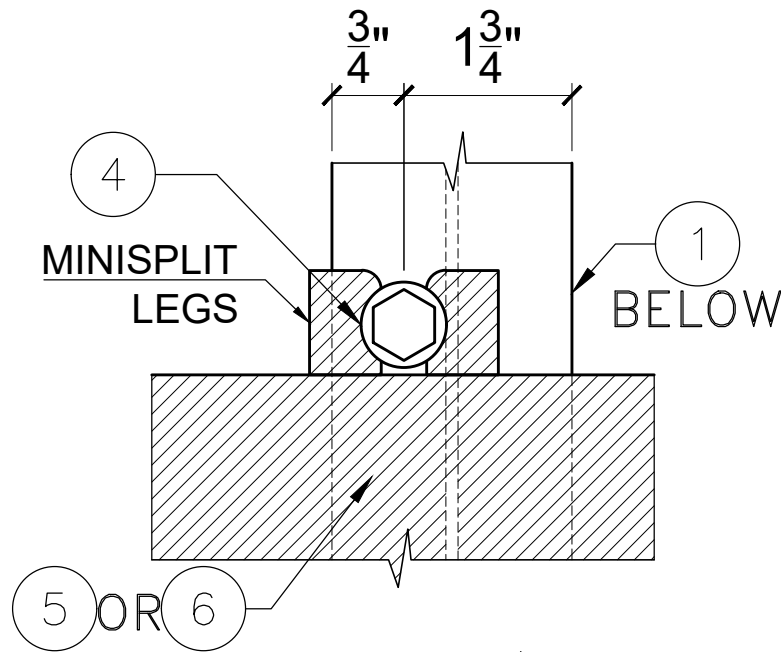
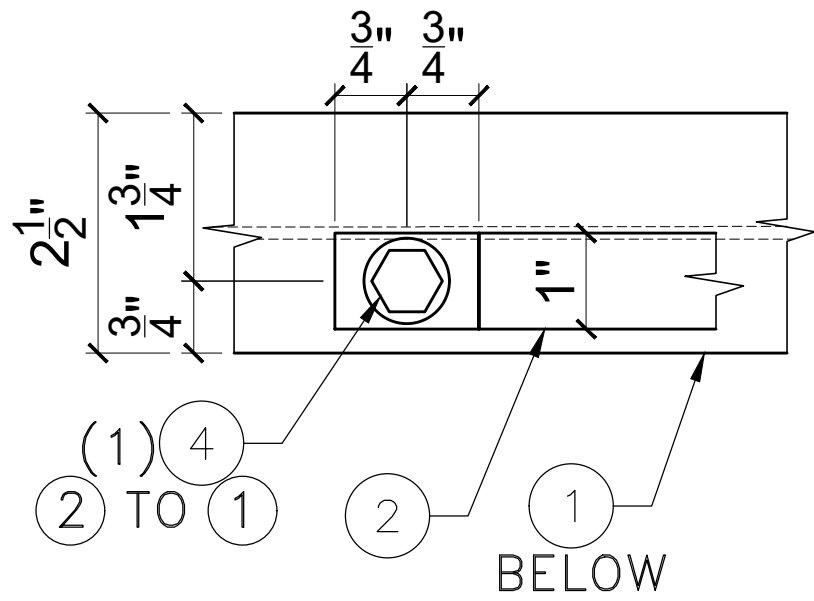
TILTECO INC.

TILLIT TESTING & ENGINEERING COMPANY
 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL. 33166
 Phone : (305)871-1530 · Fax : (305)871-1531
 CA-0006719
 WALTER A. TILLIT JR., P.E.
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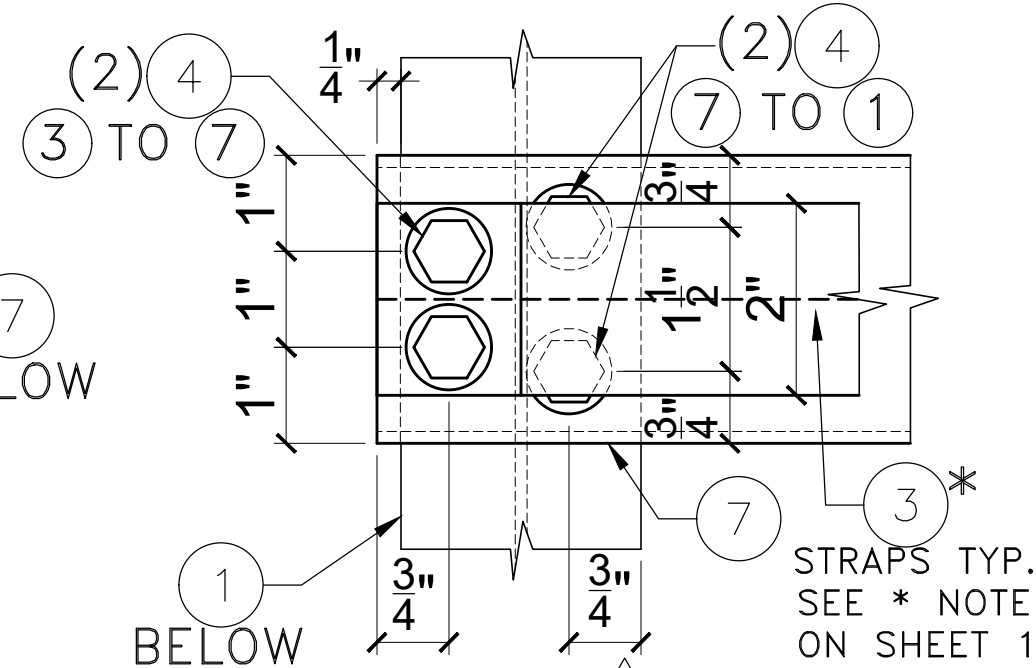
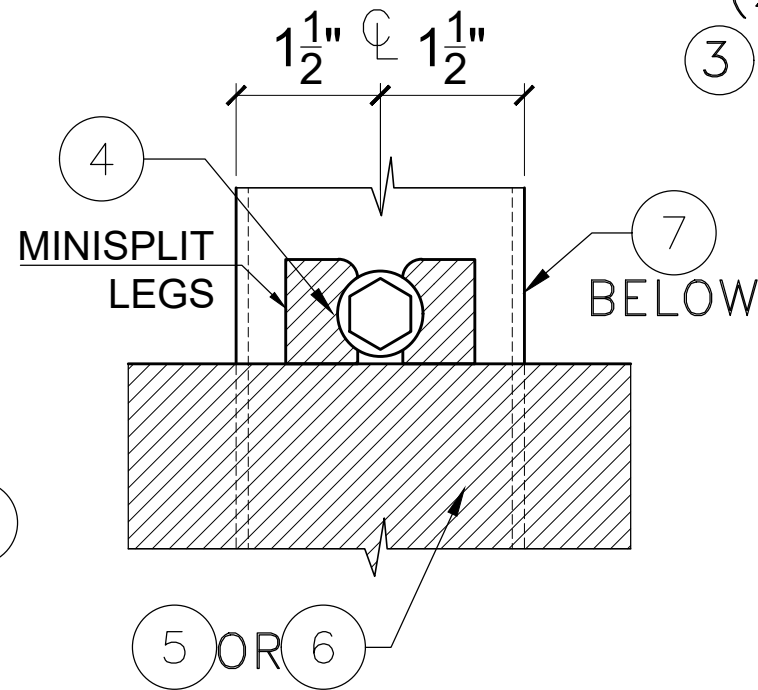
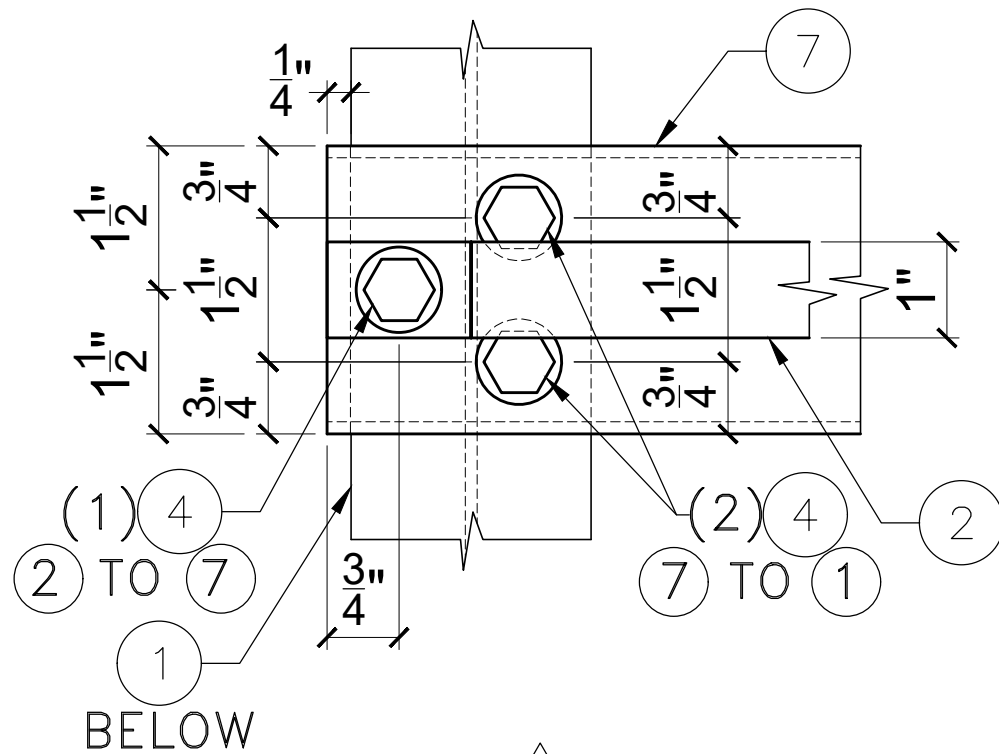
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**DETAIL 1: VIEW Δ ' (PLAN)
CASE I ($H_u < 34''$)**

**DETAIL 2: VIEW Δ ' (PLAN)
CASE I ($H_u < 56''$)**

**DETAIL 3: VIEW Δ ' (PLAN)
CASE I ($H_u < 56''$, $H_u > 34''$)**



**DETAIL 4: VIEW Δ ' (PLAN)
CASE II ($H_u < 34''$)**

**DETAIL 5: VIEW Δ ' (PLAN)
CASE II ($H_u < 56''$)**

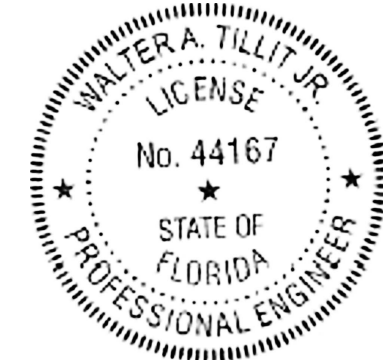
**DETAIL 6: VIEW Δ ' (PLAN)
CASE II
($H_u < 56''$, $H_u > 34''$)**

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

F.R.L. DRAWN BY:	11/12/24	DATE:	24-131	DRAWING No.	SHEET 7 OF 7
INSTALLATION OF MINI-SPLIT UNITS INTO APPROVED STANDS	F & L ALUMINUM PARTS, INC. 2087 N. POWERLINE RD. SUITE #1 POMPANO BEACH, FL. 33069				
REV. NO	DESCRIPTION	DATE	REV. No	DATE	
1	-	-	3	-	-
2	-	-	4	-	-

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