

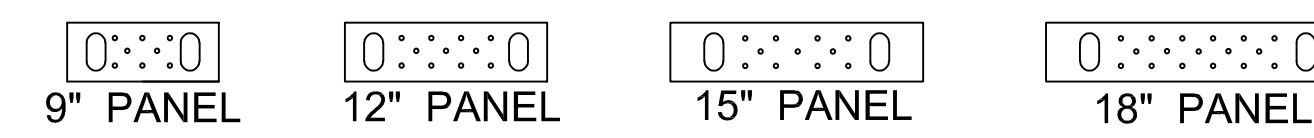
**POST INSTALLED**

**CAST IN PLACE**

**FOUNDATION ANCHORAGE REQUIREMENTS - SEISMIC**

**ANCHORAGE NOTES**

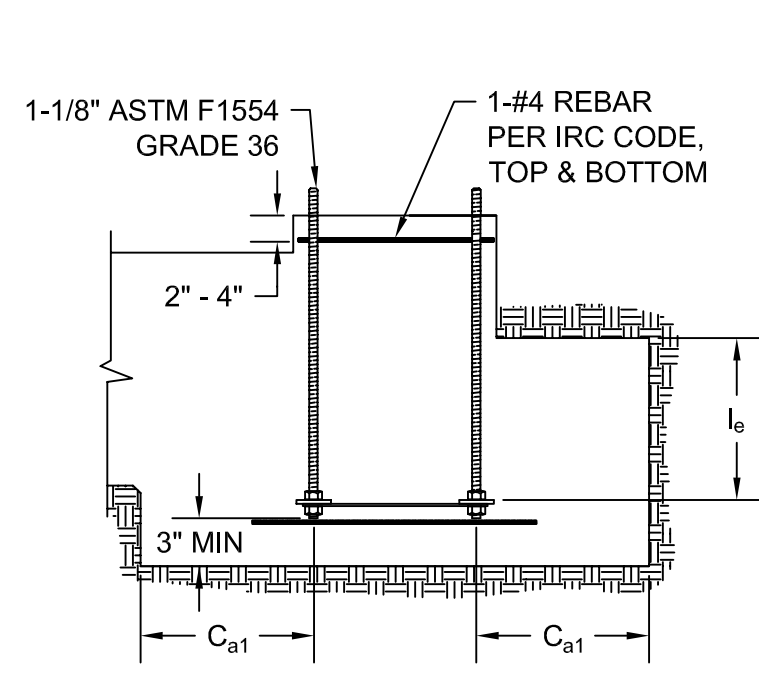
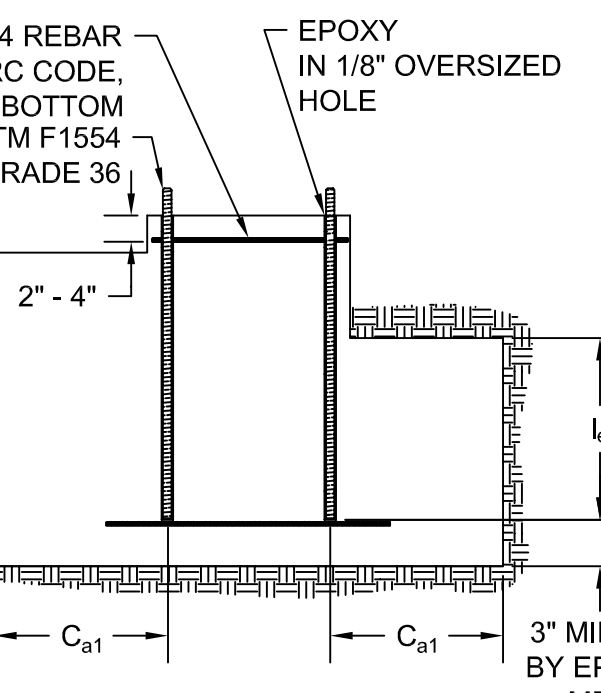
MODEL NUMBER	NET HEIGHT (in)	DEPTH (in)	HOLD DOWN DIAMETER (in)	TOP SCREW QUANTITY (EA)	SCREW HOLE QTY AVAILABLE AT EDGES (EA)
HFX-12 x 78 HFX-15 x 78 HFX-18 x 78	78	3-1/2	1-1/8	9" WIDTH = 5 12" WIDTH = 6 15" WIDTH = 8 18" WIDTH = 10	4
HFX-9 x 79.5	79-1/2				
HFX-9 x 8	93-3/4				
HFX-12 x 8 HFX-15 x 8 HFX-18 x 8	92-1/4				5
HFX-12 x 9 HFX-15 x 9 HFX-18 x 9	104-1/4				
HFX-15 x 10 HFX-18 x 10	116-1/4				
HFX-15 x 11 HFX-18 x 11	128 1/4	6			
HFX-15 x 12 HFX-18 x 12	140 1/4				



**INSTALLATION INSTRUCTIONS**

- WHEN INSTALLING DIRECTLY ON CONCRETE, PLACE PANEL OVER BOLTS AND CONNECT WITH (1 EA) HARDENED ROUND WASHER AND A GRADE 8 OR 2H HEAVY HEX NUT. SECURE WITH A DEEP SOCKET (RECOMMENDED) UNTIL "SNUG TIGHT".
- USE 1/4"x4-1/2" MITEK PRO-SERIES "WS-45" SCREWS AT TOP CONNECTIONS WITH A 2x FILLER. IF THE TOP OF PANEL IS IN DIRECT CONTACT WITH THE COLLECTOR ABOVE (TOP PLATES, HEADER, BEAM, ETC.) USE 1/4" x 3" (MINIMUM)
- FOR INSTALLATIONS WITH A FILLER GREATER THAN 2" THICK ABOVE, 1/4" DIAMETER SCREWS ARE REQUIRED AT THE PANEL EDGES TO BRACE FOR THE OUT-OF-PLANE HINGE OR WHEN THEY ARE SPECIFIED BY THE DESIGN PROFESSIONAL.
- UP TO A 3/8" PLY, OSB OR WOOD SHIM MAY BE USED TO COMPENSATE FOR VARIATIONS IN STANDARD STUD HEIGHTS.
- THERE IS NO "INSIDE" OR "OUTSIDE" FACE OF PANEL. TO PREVENT THE NEED FOR ADDITIONAL HOLES ORIENT THE PANEL CAVITY TOWARD THE FIXTURE BEING INSTALLED.

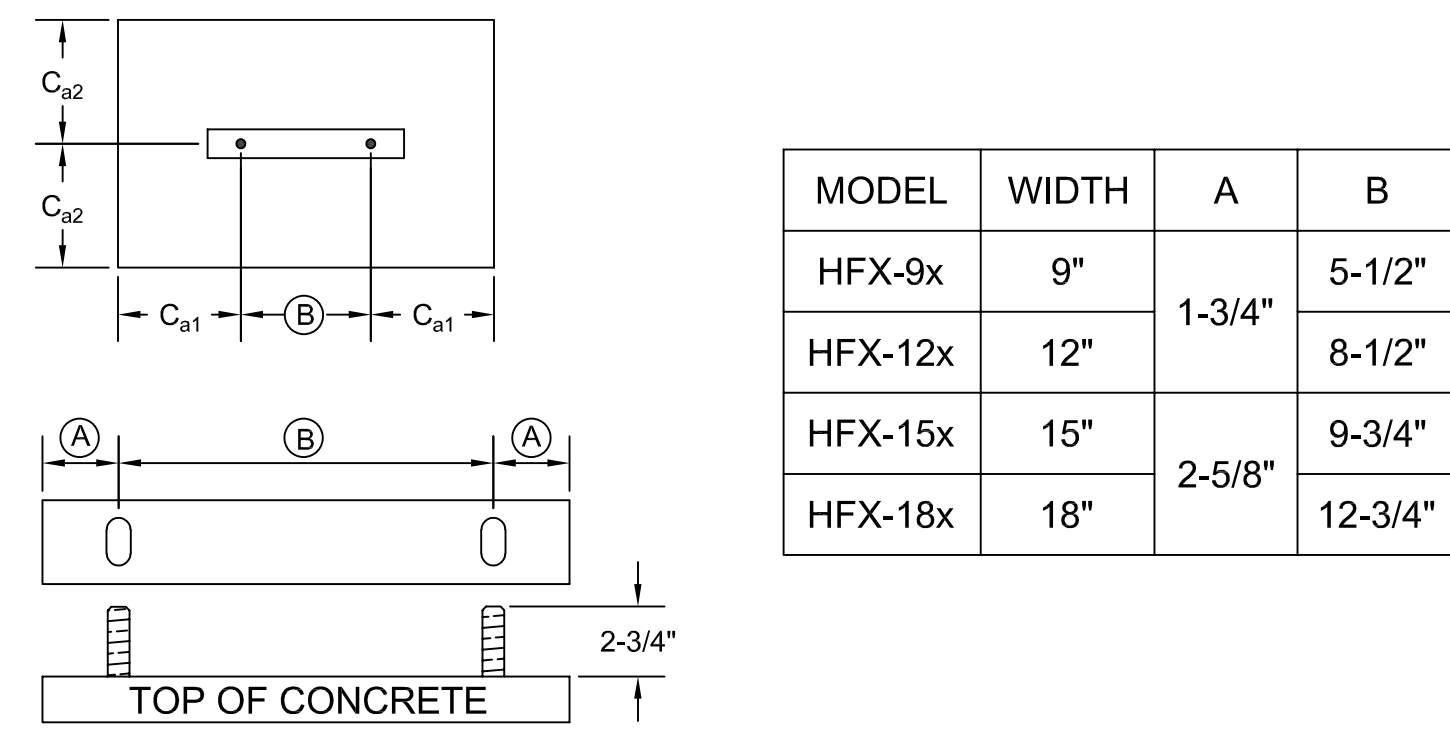
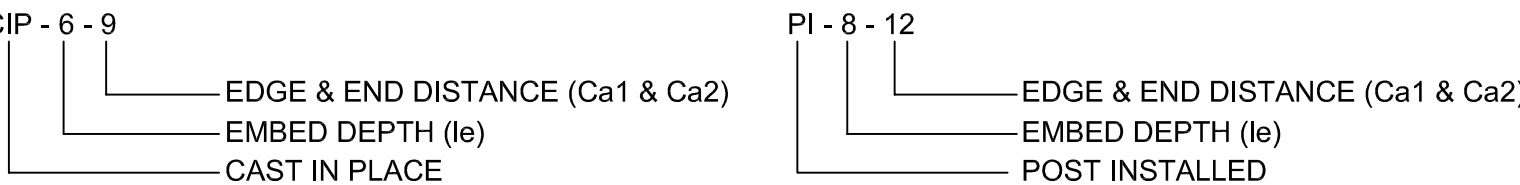
**GENERAL NOTES**



MODEL NUMBER	EQUIVALENT WALL BRACING LENGTH (ft)	CAST IN PLACE <sup>1</sup>		POST INSTALLED <sup>2</sup>	
		EMBED DEPTH <sup>3</sup> (in)	EDGE & END <sup>4,5</sup> (in)	EMBED DEPTH <sup>3</sup> (in)	EDGE & END <sup>4,5</sup> (in)
HFX-9x79.5 HFX-9x8	6	9	13-1/2	15	19
HFX-12x78 HFX-12x8	4	7	10-1/2	10	14
HFX-12x9 HFX-12x10	6	8-1/2	12-3/4	12	16
HFX-15x78 HFX-15x8	4	6-1/2	9-3/4	8	14
HFX-15x9 HFX-15x10	6	7	10-1/2	8	12
HFX-15x11 HFX-15x12	4	5-1/2	8-1/4	6	12
HFX-18x9 HFX-18x10	6	7-1/2	11-1/4	10	14
HFX-18x11 HFX-18x12	4	6	9	8	12
HFX-18x8	6	10-1/2	15-3/4	17	21
HFX-18x78 HFX-18x8	4	8	12	12	16
HFX-18x9 HFX-18x10	6	6-1/2	9-3/4	7	11
HFX-18x11 HFX-18x12	4	5	7	5	11
HFX-18x8	6	7	10-1/2	8	12
HFX-18x10	4	5-1/2	8-1/4	6	11
HFX-18x11 HFX-18x12	6	9	13-1/2	13	17
HFX-18x8	4	7-1/2	11-1/4	9	13

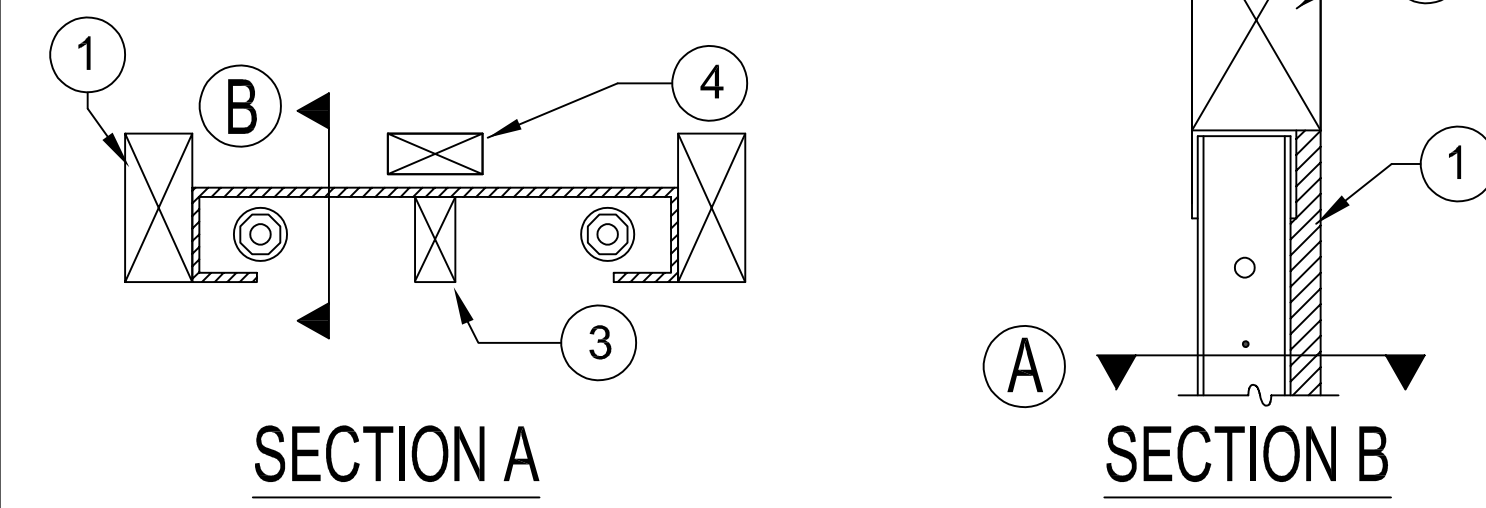
- CAST-IN FOUNDATION ANCHORAGE SOLUTIONS ARE BASED ON THE REQUIREMENTS OF THE AMERICAN CONCRETE INSTITUTE (ACI) 318-19, CHAPTER 17, INCLUDING THE SPECIFIC SEISMIC PROVISIONS OF SECTION 17.2.3 AND THE 0.75 REDUCTION FACTOR FOR CRACKED CONCRETE. A CONCRETE COMPRESSIVE STRENGTH OF 2,500 PSI IS ASSUMED. TABULATED FOUNDATION DESIGN RECOMMENDATIONS REPRESENT MINIMUM ANCHORAGE REQUIREMENTS IN ACCORDANCE WITH THE FOLLOWING ASSUMPTIONS:
  - NO SUPPLEMENTAL REINFORCEMENT FOR SPLITTING DUE TO CONCRETE BREAKOUT.
  - NO SHEAR REINFORCEMENT GREATER THAN NO. 4 BARS.
- POST-INSTALLED FOUNDATION ANCHORAGE SOLUTIONS REQUIRE THE USE OF AN APPROVED EPOXY ADHESIVE WITH 708 PSI (MIN) BOND STRENGTH UNDER THE FOLLOWING FIELD CONDITIONS:
  - TEMPERATURE RANGE IS 110°F LONG TERM AND 130°F SHORT TERM.
  - PERIODIC INSPECTION IN ACCORDANCE WITH THE LOCAL JURISDICTION.
  - DRY CONCRETE.
  - 1 1/8 IN. ASTM F1554 GRADE A36 ANCHOR ROD.
- $l_e$  = LENGTH OF EMBEDMENT FROM THE TOP OF FOOTING OR GRADE BEAM TO THE TOP OF THE HFXBB BOLT BRACE.
- $C_{a1}$  = DISTANCE FROM HD CENTERLINE TO THE END OF THE FOOTING OR GRADE BEAM.
- $C_{a2}$  = DISTANCE FROM HD CENTERLINE TO BOTH THE FRONT AND THE BACK FACE OF THE FOOTING OR GRADE BEAM.
- CONCRETE COVERAGES MUST COMPLY WITH ACI 318-14, SECTION 17.7.1
- ANCHORS ARE ASTM F1554 GRADE 36 WITH A HARDY FRAME BOLT BRACE (HFXBB) INSTALLED WITH DOUBLE NUTS ON THE EMBED END.
- REINFORCEMENT SHOWN IS THE MINIMUM REQUIREMENT PER CODE AND IS NOT INTENDED TO REPLACE REINFORCEMENT DESIGNED BY THE EOR.
- ANCHORAGE IS DESIGNED FOR TENSION AND SHEAR TRANSFER ONLY. FOUNDATION DESIGN PER DESIGN PROFESSIONAL.

**ANCHORAGE NOMENCLATURE**



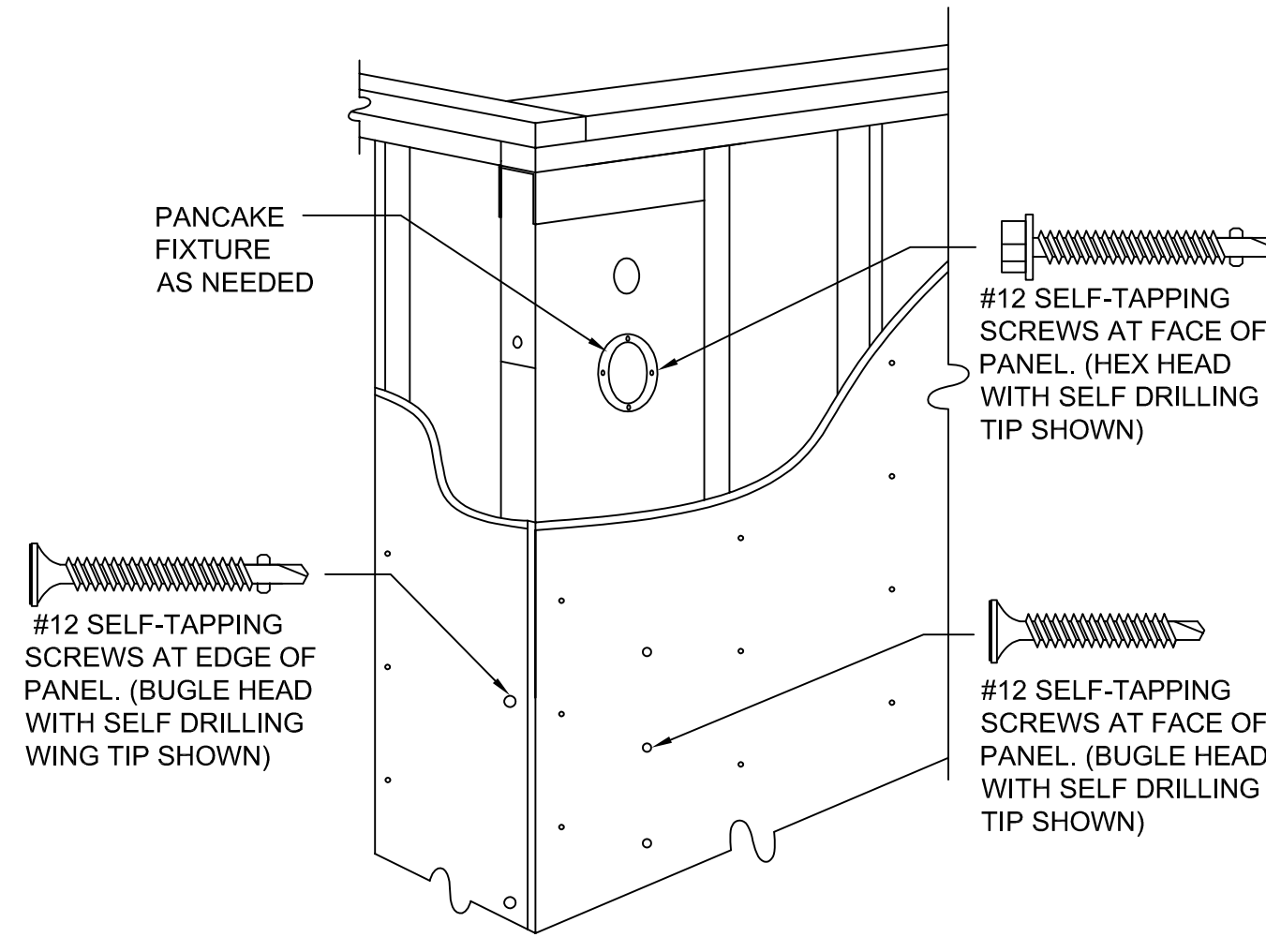
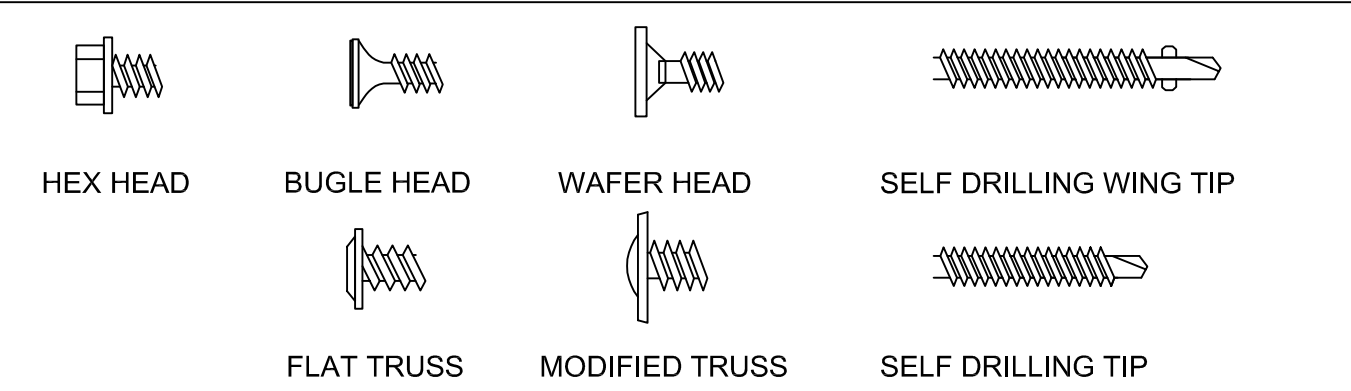
**CAST IN PLACE & POST INSTALLED ANCHORAGE**

ATTACHMENTS MAY BE MADE AT SCREW HOLES PROVIDED OR WITH #12 SELF TAPPING SCREWS AT PANEL EDGES OR FACE.



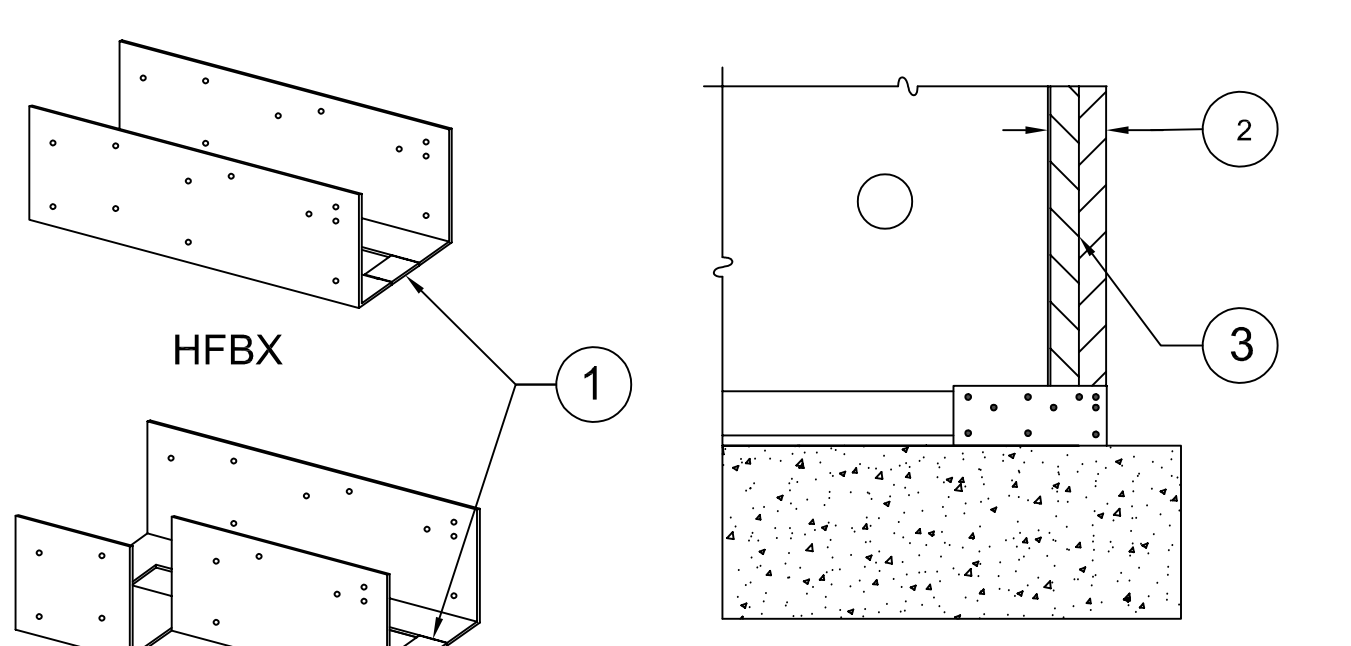
- TRIMMERS PROVIDE FULL BEARING FOR HEADER ABOVE, DESIGN AND CONNECTIONS BY OTHERS.
- 6x HEADER.
- WOOD MEMBERS MAY BE INSERTED VERTICALLY OR HORIZONTALLY IN CAVITY FOR BACKING AS NEEDED.

**6x HEADER ABOVE (SECTION)**



- SURFACE FINISHES, CONNECTORS AND FIXTURES ARE ATTACHED TO THE PANEL FACE WITH #12 SELF-TAPPING SCREWS SPACED NO LESS THAN 2-1/4" OC.
- ATTACHMENTS TO THE PANEL EDGES ARE MADE WITH #12 SELF-TAPPING SCREWS.
- STRUCTURAL CONNECTIONS ARE TO BE DESIGNED BY THE DESIGN PROFESSIONAL.
- STRUCTURAL HARDWARE USED TO TRANSFER LOADS SHOULD NOT EXCEED 12 GAGE.

**CONNECTION SCREWS**



- "BREAK-AWAY" TAB ALLOWS INSTALLATION AFTER PANEL HAS BEEN SET.
- ADJUSTABLE INSTALLATION FOR HFBX EXTENDS UP TO 6-1/2" BEYOND FACE OF PANEL.
- WOOD MEMBERS PER DESIGN PROFESSIONAL.

**BASE EXTENSION**

**CURB AT OUTSIDE CORNER**

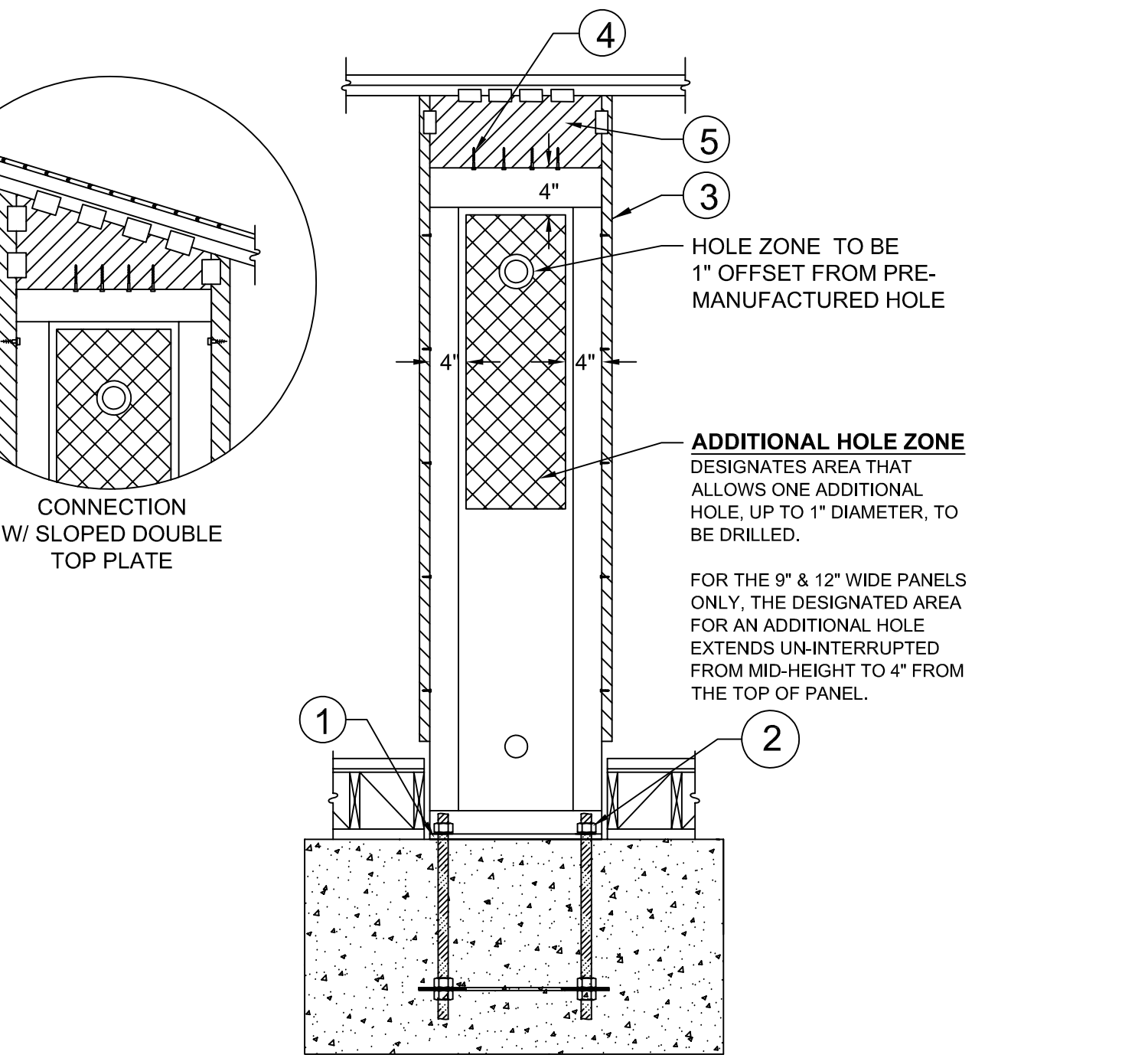
**CURB AT OUTSIDE CORNER**

**CURB (EDGE) CONDITION**

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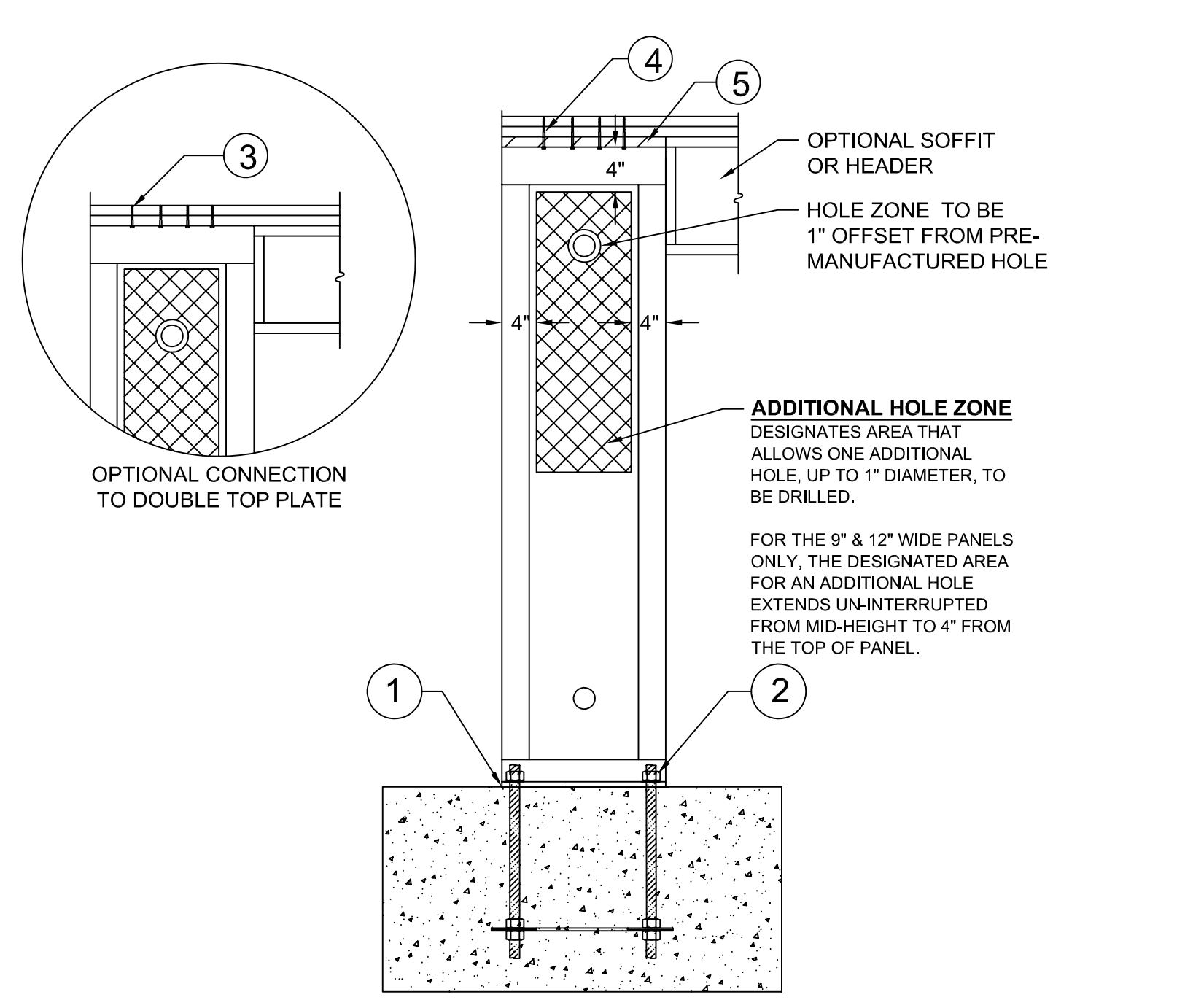
**INTERIOR CONDITION**

**INTERIOR CONDITION**



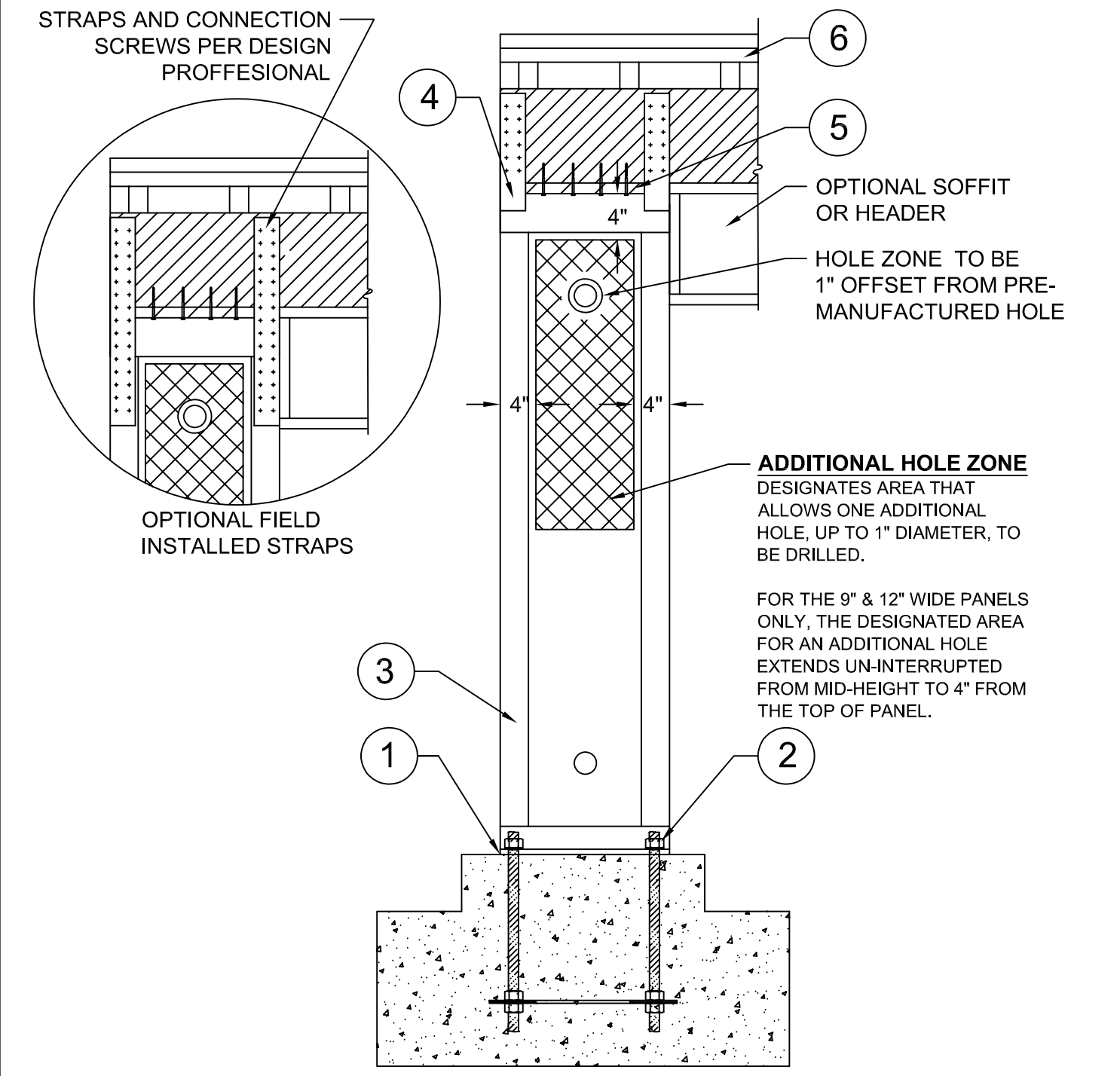
- 15# FELT OR EQUIVALENT MOISTURE BARRIER CAN BE PLACED BETWEEN PANEL BASE AND CONCRETE.
- 1 EA. HARDENED ROUND WASHER AND GRADE 8 HEX NUT.
- ADJACENT FRAMING WITH 1/4" DIAMETER PRO-SERIES SCREWS INSTALLED AT THE EDGES AS SPECIFIED BY DESIGN PROFESSIONAL.
- 1/4" x 3" (MIN) MITEK PRO-SERIES "WS-3" SCREWS. QUANTITY PER TABLES.
- WOOD FILLER WITH USP MP4-F CONNECTORS ON BOTH SIDES, QUANTITY BY BUILDING DESIGN PROFESSIONAL.

**RAISED FLOOR WITH WOOD FILLER**



- 15# FELT OR EQUIVALENT MOISTURE BARRIER CAN BE PLACED BETWEEN PANEL BASE AND CONCRETE.
- 1 EA. HARDENED ROUND WASHER AND GRADE 8 HEX NUT.
- 1/4" x 3" (MIN) MITEK PRO-SERIES "WS-3" SCREWS. QUANTITY PER TABLES.
- 1/4" x 4-1/2" (MIN) MITEK PRO-SERIES "WS-45" SCREWS. QUANTITY PER TABLES.
- 2x WOOD FILLER.

**INSTALLATION ON SLAB FOUNDATION**



- 15# FELT OR EQUIVALENT MOISTURE BARRIER CAN BE PLACED BETWEEN PANEL BASE AND CONCRETE.
- 1 EA. HARDENED ROUND WASHER AND GRADE 8 HEX NUT.
- ADJACENT FRAMING OPTIONAL U.N.O. BY BUILDING DESIGN PROFESSIONAL.
- WELDED STRAPS ARE AVAILABLE FROM MANUFACTURER WHEN REQUIRED BY THE DESIGN PROFESSIONAL.
- A 2x WOOD FILLER WITH 1/4"x4-1/2" (MIN.) MITEK PRO-SERIES "WS-45" SCREWS IS PERMITTED.
- WHEN CRIPPLE STUDS OCCUR, SHEAR TRANSFER DESIGN TO BE PER THE DESIGN PROFESSIONAL.

**INSTALLATION ON CURB**

**INSTALLATION DETAILS FOR PRESCRIPTIVE SOLUTIONS**

COMPLIES WITH 2021 IRC CODE

HARDY FRAME SHEAR WALL SYSTEMS  
16023 SWINGLEY RIDGE RD  
CHESTERFIELD, MO 63017  
(800) 325-8075  
WWW.HARDYFRAME.COM

**Mitek**

DATE:  
1-1-2024

**HFX-S**