A

### DATE: 1-1-2023

## HFX4

HS INDICATES ANCHORS COMPLYING WITH ASTM A193 GRADE B7 WITH A 1/2"x3"x3"(MIN) HFPW PLATE WASHER INSTALLED WITH DOUBLE NUTS ON THE EMBED END (HFXBB NOT REQUIRED).

STD OR GRADE 8 DOUBLE NUTS ON THE EMBED END.

LE = LENGTH OF EMBEDMENT FROM THE TOP OF FOOTING OR GRADE BEAM TO THE TOP OF THE HFXBB BOLT BRACE (TOP OF THE EMBEDDED HFPW PLATE WASHER @ HS ANCHORS)

5. CA1 = DISTANCE FROM HD CENTERLINE TO THE END OF THE FOOTING OR GRADE BEAM.

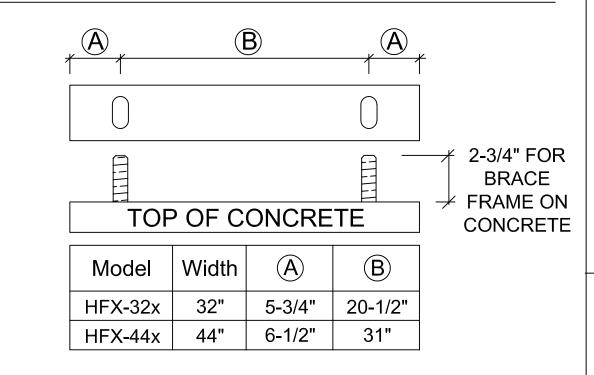
6. CA2 = DISTANCE FROM HD CENTERLINE TO BOTH THE FRONT AND THE BACK FACE OF THE FOOTING OR GRADE BEAM.

SHEAR TIES ARE GRADE 60 (MIN) REBAR AND REQUIRED FOR NEAR EDGE DISTANCE CONDITIONS PER ACI 318-19, F'C = 2,500 PSI. CURBS AND STEM WALLS MUST BE 6 INCH (MIN) WIDTH FOR UA AND RA, 12 INCH (MIN) WIDTH FOR BB-RA.

8. FOR UA APPLICATIONS, ADDITIONAL TIES MAY BE REQUIRED AT STEM WALLS. SHEAR TIES ARE NOT REQUIRED FOR INSTALLATION AWAY FROM EDGE (SEE DETAIL 1A), INSTALLATION ON WOOD FRAMING, OR FOR IRC BRACED WALL PANEL APPLICATIONS.

9. STIRRUPS ARE GRADE 60 (MIN) REBAR. SEE TABLE FOR SIZE AND SPACING. SEE "STIRRUP LAYOUT" DIAGRAMS AND "KEY" FOR LAYOUT PATTERNS.

10. CONCRETE EDGE DISTANCES MUST COMPLY WITH ACI 318-19, SECTION 17.9.2. COATED REINFORCEMENT MAY BE SPECIFIED BY THE EOR TO LIMIT EXPOSURE AND THEREFORE REDUCE MINIMUM CONCRETE COVER. COATED REINFORCEMENT MUST COMPLY WITH ACI 318-19, SECTION 20.5.2.



#### HFX ANCHOR CENTERLINES

(1A)

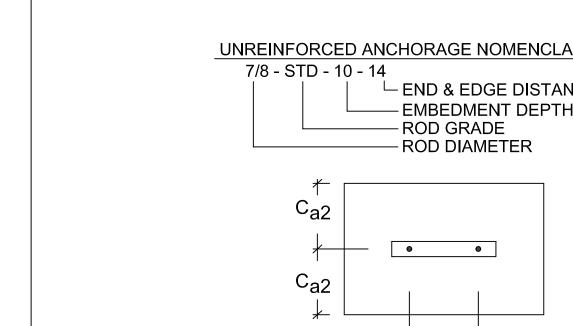
(1B)

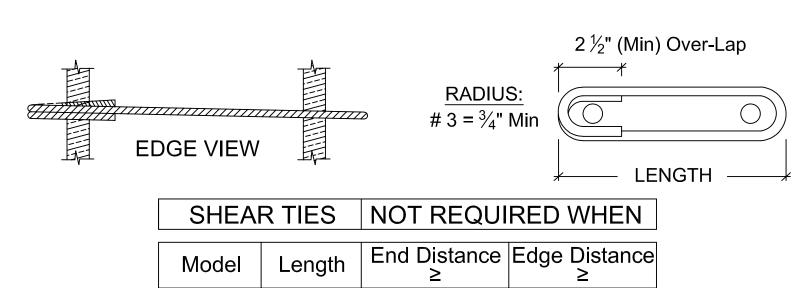
#### **IMPORTANT!**

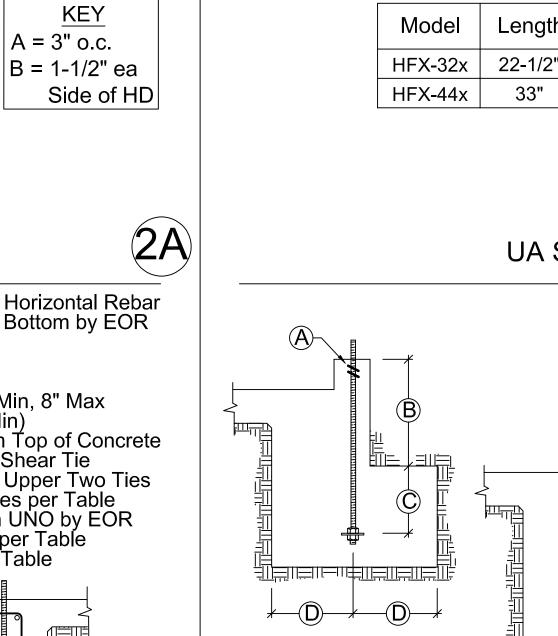
- ANCHORAGE IS DESIGNED FOR TENSION AND SHEAR TRANSFER ONLY, FOUNDATION DESIGN PER EOR.
- 2. REINFORCEMENT SHOWN IS THE MINIMUM REQUIREMENT AND IS NOT INTENDED TO REPLACE REINFORCEMENT DESIGNED BY THE EOR.
- 3. HIGH STRENGTH ALL-THREAD RODS PROVIDED BY MITEK HARDY FRAME ARE STAMPED ON BOTH ENDS.

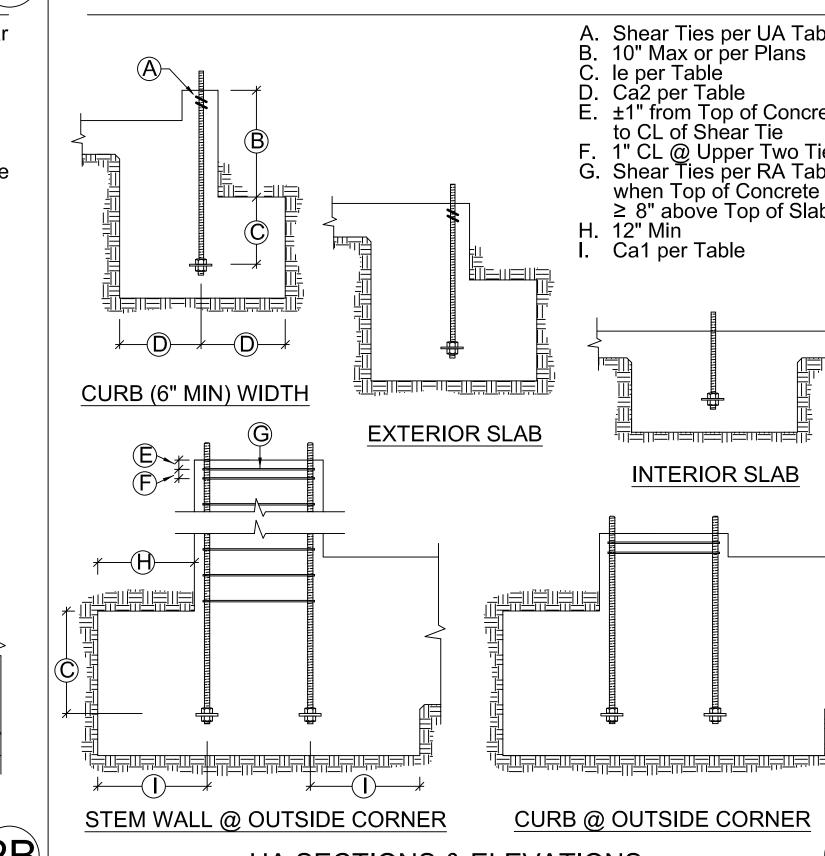
# UNREINFORCED ANCHORAGE (UA)

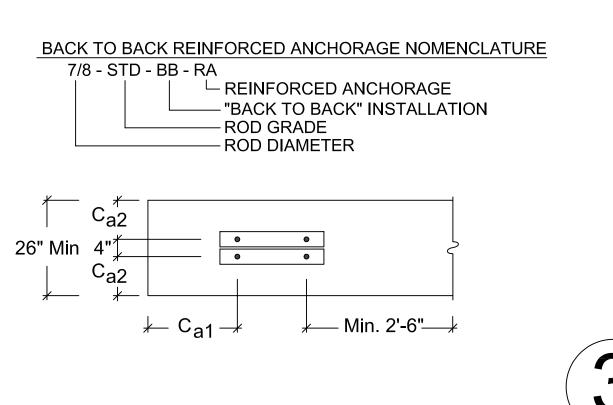
	brace		l Rou			UA	
Model	Frame Height	Anchorage <sup>1</sup>	Dia (in)	Rod <sup>2,3</sup> Grade	le <sup>4</sup> (in)	Ca1 <sup>5</sup> & Ca2 <sup>6</sup> (in)	Shear <sup>7</sup> Ties
HFX-32x	8' - 13'	7/8-STD-10-14	7/8	STD	10	14	1 - # 3
111 X-32X		7/8-HS-15-22		HS	15	22	
HFX-44x		7/8-STD-10-14		STD	10	14	1 - # 3
111 X-44X		7/8-HS-15-22		HS	15	22	2 - # 3











BACK TO BACK REINFORCED ANCHORAGE (BB-RA)

Rod | Dia | Rod <sup>2,3</sup> |

(in)

Grade

STD

HS

STD

HS

(in)

23-3/4

Anchorage <sup>1</sup>

7/8-STD-BB-RA

7/8-HS-BB-RA

7/8-STD-BB-RA

7/8-HS-BB-RA

Model

HFX-32x

HFX-44x

Frame

Height

8' - 13'

BB-RA

5 Ca2 Stirrups 9 (in)

12 - # 4

# 3 (min)

Model

HFX-32x

HFX-44x

16"

↓ 9" Min ٰ ↓

ົ11" Max່

Frame

Height

8' - 13'

Anchorage

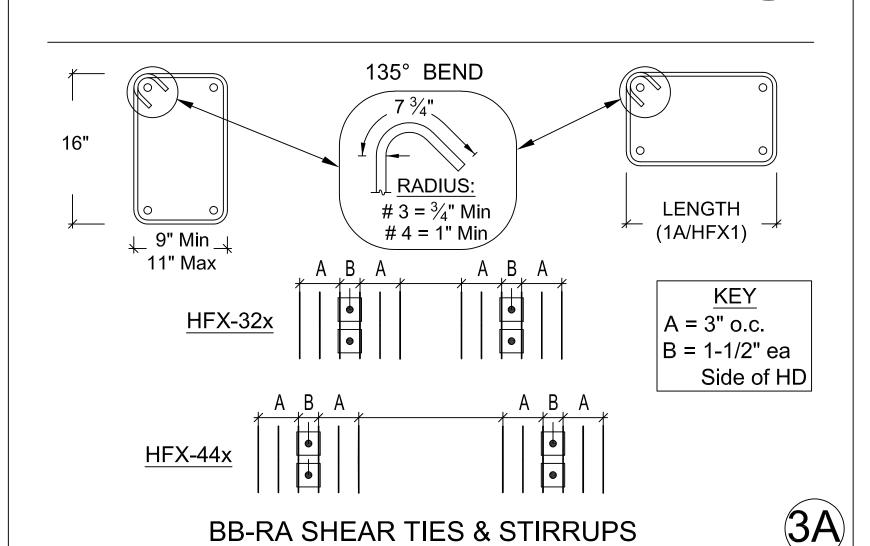
7/8-STD-RA

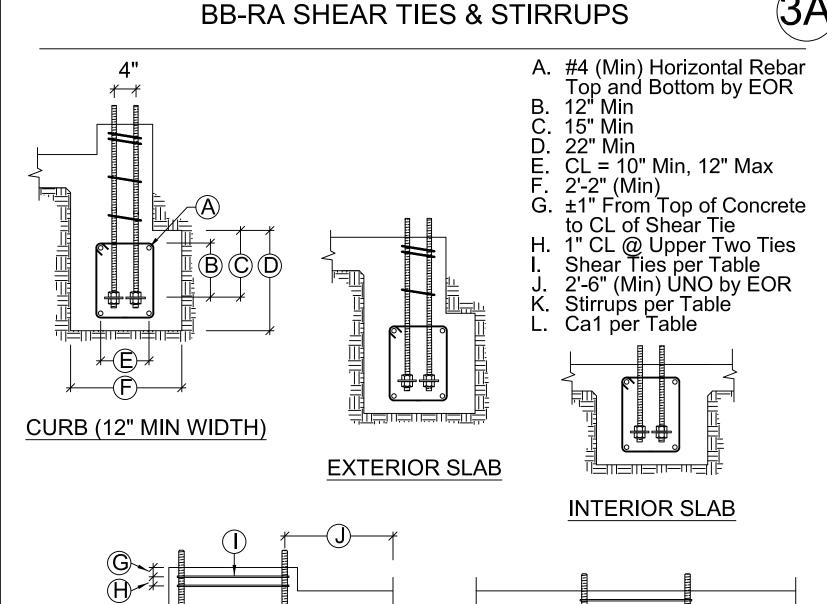
7/8-HS-RA

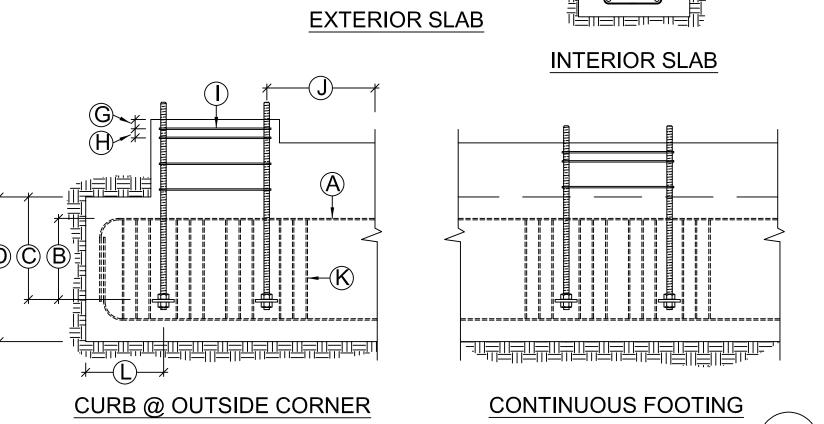
7/8-STD-RA

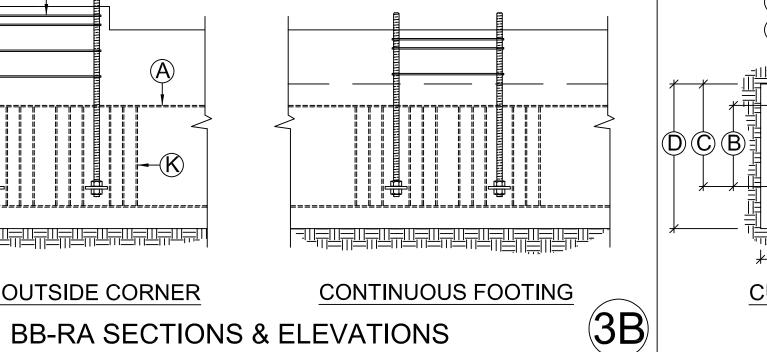
7/8-HS-RA

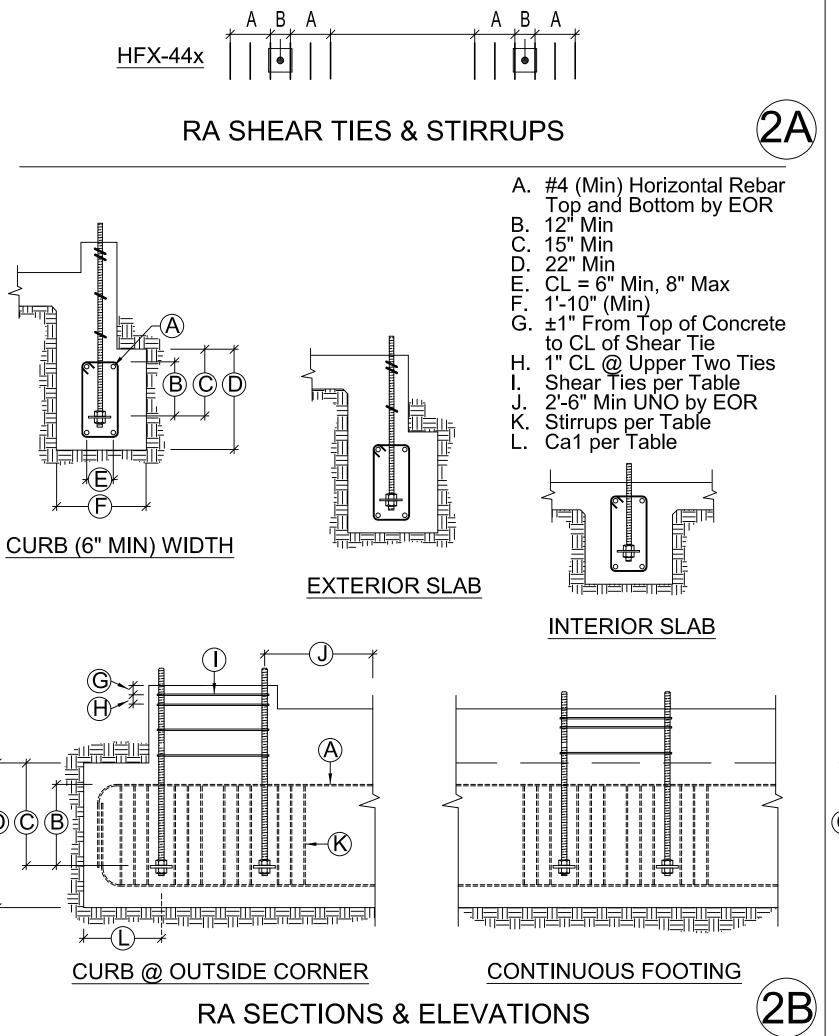
7/8 - STD - RA











REINFORCED ANCHORAGE (RA)

Dia Rod <sup>2,3</sup>

(in)

REINFORCED ANCHORAGE NOMENCLATURE

135° BEND

 $^{\downarrow}$  RADIUS .

Grade

STD

HS

STD

HS

ROD GRADE

ROD DIAMETER

- REINFORCED ANCHORAGE

– Min. 2'-6"—→

**RADIUS**:

# 3 =  $\frac{3}{4}$ " Min

(in)

 $\begin{bmatrix} c_{a1}^{\phantom{0}5} & c_{a2}^{\phantom{0}6} \\ (in) & (in) \end{bmatrix}$  Stirrups  $^9$  Shear  $^7$  Ties

12 - # 4

 $2\frac{1}{2}$ " (Min) Over-Lap

LENGTH

(1A/HFX4)

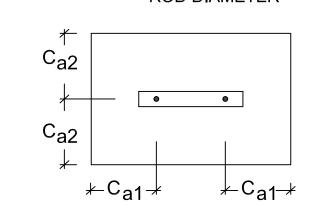
# 3 (min)

@ 4" OC

B7

**IMPORTANT NOTES** 

#### UNREINFORCED ANCHORAGE NOMENCLATURE - END & EDGE DISTANCE (C<sub>a1</sub> & C<sub>a2</sub>) – EMBEDMENT DEPTH (I<sub>e</sub>)



Model	Length	End Distance ≥	Edge Distance ≥			
HFX-32x	22-1/2"	10-3/8"	6"			
HFX-44x	33"	10-3/8"	6"			
			•			

#### **UA SHEAR TIES**

# A. Shear Ties per UA Table B. 10" Max or per Plans C. le per Table D. Ca2 per Table E. ±1" from Top of Concrete to CL of Shear Tie F. 1" CL @ Upper Two Ties G. Shear Ties per RA Table when Top of Concrete is ≥ 8" above Top of Slab

**UA SECTIONS & ELEVATIONS** 

MODEL NUMBER HFX-32x8 92-1/4 HFX-44x8 HFX-32x9 104-1/4 HFX-44x9 32" Width = 10 HFX-32x10 116-1/4 HFX-44x10 3-1/2 7/8 HFX-32x11 128-1/4 44" Width = 14 HFX-44x11 HFX-32x12 140-1/4

#### TABLE NOTES

**SECTION B** 

**SECTION A** 

TRIMMERS PROVIDE FULL BEARING FOR HEADER ABOVE, DESIGN

WOOD MEMBER FLUSH TO FACE OF WALL FOR BACKING AS NEEDED.

6x HEADER ABOVE-SECTION (1

(A) PRE-WELDED STRAPS ARE AVAILABLE UPON REQUEST

2. A 2x WOOD FILLER WITH 1/4"x4-1/2" (MIN.) WS SCREWS IS

PER THE BUILDING DESIGN PROFESSIONAL.

(B) FIELD INSTALLED STRAPS WITH SELF TAPPING SCREWS ARE PERMITTED. THE DESIGN AND CONNECTION IS BY THE DESIGN

WHEN CRIPPLE STUDS OCCUR, SHEAR TRANSFER DESIGN TO BE

TOP CONNECTION TO HEADER 4

AND CONNECTIONS BY BUILDING DESIGN PROFESSIONAL

- FOR STD OR HS GRADE HOLD DOWN ANCHOR BOLTS CONNECT TO THE BRACE FRAME BASE WITH HARDENED ROUND WASHERS BELOW GRADE 8 NUTS. ALTERNATE WASHERS ARE (2 EA) ROUND-FLAT OR (2 EA) SAE WASHERS ON EACH BOLT. ALTERNATE NUTS ARE 2H HEAVY HEX.
- 2. 1/4" DIAMETER MITEK<sup>®</sup> PRO SERIES™ WS SCREWS. LENGTH IS 3" (MINIMUM) WHEN ATTACHED DIRECTLY TO THE COLLECTOR AND 4-1/2" (MINIMUM) WHEN INSTALLING A 2x FILLER ABOVE THE BRACE FRAME.
- ADJACENT FRAMING CONNECTED TO THE BRACE FRAME EDGES AND THE FILLER IS REQUIRED WHEN INSTALLING A FILLER ABOVE THE TOP CHANNEL THAT IS GREATER THAN 1-1/2" OR WHEN SPECIFIED BY THE DESIGN PROFESSIONAL



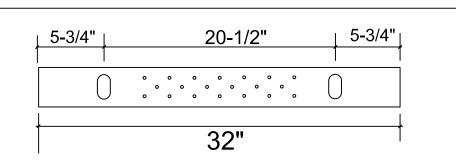
HFX-44x12

HFX-32x13

HFX-44x13

152-1/4

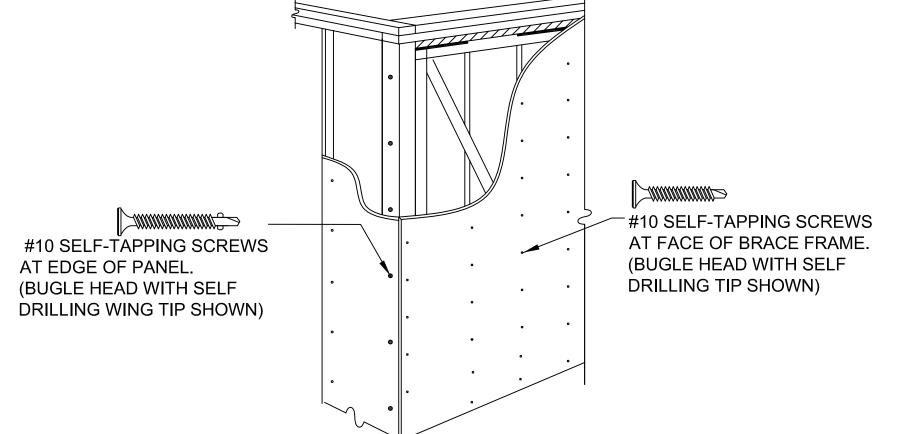
- WHEN INSTALLING ON CONCRETE CONNECT WITH (1 EA) HARDENED ROUND WASHER BELOW (1 EA) GRADE 8 NUT, SECURE WITH A SOCKET OR WRENCH UNTIL SNUG TIGHT. ALTERNATE WASHERS AND NUTS ARE PROVIDED IN TABLE NOTE 1
- INSTALLATION ON CONCRETE PROVIDES THE HIGHEST ALLOWABLE VALUES. CONFIRM WITH THE DESIGN PROFESSIONAL BEFORE INSTALLING ON OTHER SUPPORTING SURFACES
- USE 1/4"X4-1/2" MITEK<sup>®</sup> PRO SERIES™ WS SCREWS AT TOP CONNECTIONS WITH A 2x FILLER. IF THE TOP OF BRACE FRAME IS IN DIRECT CONTACT WITH THE COLLECTOR ABOVE (TOP PLATES, HEADER) BEAM, ETC.) USE1/4 x 3" (MINIMUM)
- 4. FOR INSTALLATIONS WITH A FILLER GREATER THAN 1-1/2" ABOVE, OR WHEN SPECIFIED BY THE DESIGN PROFESSIONAL. ADJACENT KING POSTS TO BRACE THE OUT-OF-PLANE HINGE CAN BE CONNECTED TO THE BRACE FRAME WITH SELF-TAPPING SCREWS INSTALLED THROUGH HOLES PRE-DRILLED IN THE WOOD MEMBER OR WITH USP MPF4 CONNECTORS ON EACH FACE OF THE FRAME TO THE WOOD MEMBER. FOR BOTH METHODS OF CONNECTING THE FASTENER QUANTITY IS DETERMINED BY THE BUILDING DESIGN PROFESSIONAL



32" BRACE FRAME

44" BRACE FRAME

#### HOLE PATTERN TOP & BOTTOM



NOTES:

B. STRUCTURAL CONNECTIONS ARE TO BE DESIGNED BY THE DESIGN PROFESSIONAL.

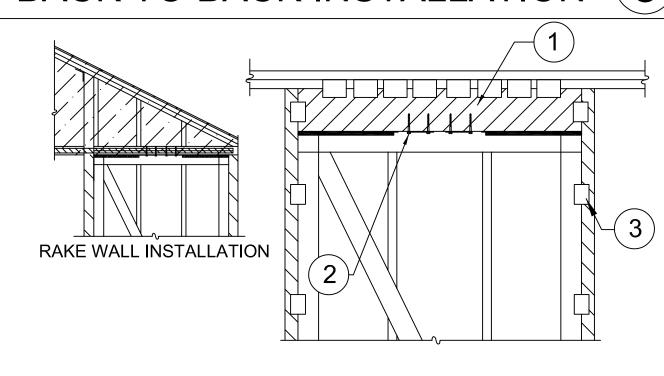
1-1-2023

DATE:

**SECTION A** NUTS AND WASHERS PER TABLE NOTE 1. NOMINAL 8 INCH FRAMING ABOVE (MIN). 3. A 2x FILLER WITH 1/4" x 4-1/2" MINIMUM

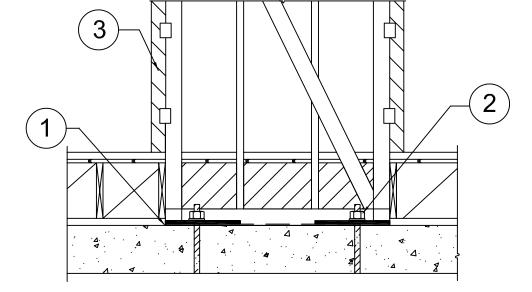
## BACK TO BACK INSTALLATION

WS SCREWS IS PERMITTED.



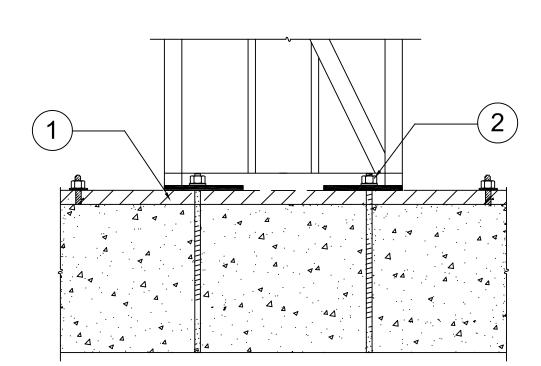
- WOOD FILLER WITH USP MP4F CONNECTORS BOTH SIDES, QUANTITY BY BUILDING DESIGN PROFESSIONAL
- 1/4" x 3" (MINIMUM) WS SCREWS, QUANTITY PER TABLES
- CONNECTORS BOTH SIDES OF FRAME AND BOTH SIDES OF FILLER TO KING POST. SEE TABLE NOTE 3, DETAIL A AND INSTALLATION INSTRUCTION NOTE 4, DETAIL B.

#### FILLER GREATER THAN 1-1/2 IN. (6)



- 15# FELT OR EQUIVALENT MOISTURE BARRIER RECOMMENDED NUTS AND WASHERS PER TABLE NOTE
- ADJACENT FRAMING WITH #10 SELF-TAPPING SCREWS OR USP MP4F CONNECTORS BOTH SIDES OF FRAME WHEN INSTALLING A FILLER GREATER THAN 1-1/2" ABOVE OR WHEN SPECIFIED BY THE DESIGN PROFESSIONAL.

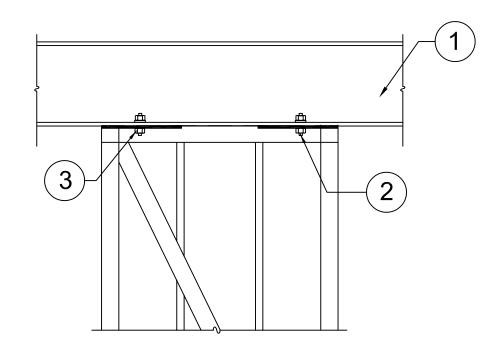
#### RAISED FLOOR HEAD-OUT



ALLOWABLE VALUES ON 2x PLATE ARE LESS THAN ON CONCRETE

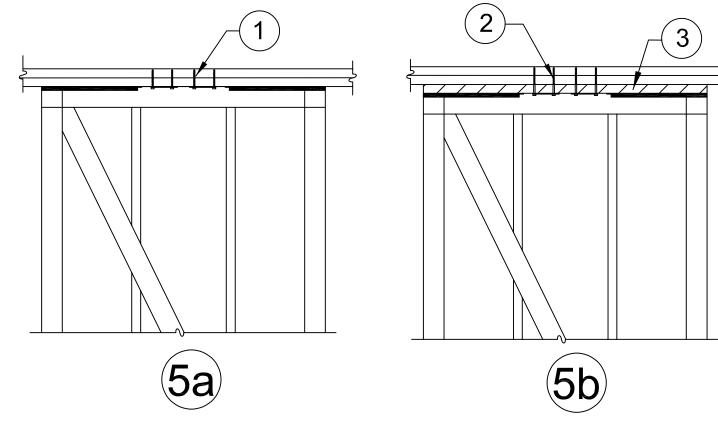
- 15# FELT OR EQUIVALENT MOISTURE BARRIER RECOMMENDED BETWEEN PANEL BASE AND TREATED PLATE.
- 2. NUTS AND WASHERS PER TABLE NOTE 1.

INSTALLATION ON 2x PLATE



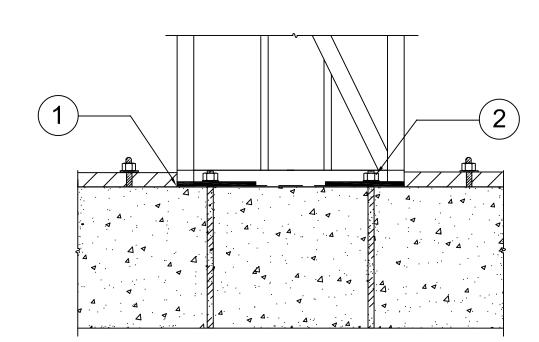
- STEEL BEAM PER PLANS
- ALL THREAD RODS THRU-BOLTED TO STEEL BEAM BY BUILDING
- NUTS AND WASHERS PER TABLE NOTE 1

#### STEEL BEAM ABOVE



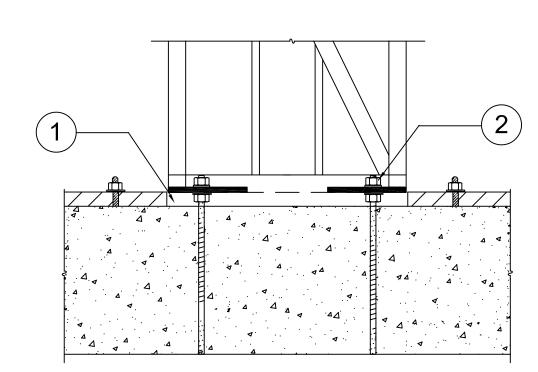
- 1. 1/4" x 3" (MINIMUM) WS SCREWS, QUANTITY PER TABLES
- 2. 1/4" x 4-1/2" (MINIMUM) WS SCREWS, QUANTITY PER TABLES
- 3. 2x WOOD FILLER.

#### TOP PLATE CONNECTIONS



- 15# FELT OR EQUIVALENT MOISTURE BARRIER RECOMMENDED BETWEEN PANEL BASE AND CONCRETE.
- 2. NUTS AND WASHERS PER TABLE NOTE 1

#### INSTALLATION ON CONCRETE



- - PLUS OR MINUS 1-1/2" GAP TO BE FILLED WITH 5,000 PSI NON-SHRINK
  - 2. NUT AND WASHER GRADES PER TABLE NOTE 1

(11) INSTALLATION ON NUTS & WASHERS (10)

BETWEEN BRACE FRAME BASE AND CONCRETE.

3. ADJACENT FRAMING OPTIONAL OR BY BUILDING DESIGN

2. NUTS AND WASHERS PER TABLE NOTE 1.

**PROFESSIONAL** 

ATTACHMENTS TO ADJACENT TRIMMERS MAY BE MADE WITH

#10 SELF-TAPPING SCREWS OR

WITH USP MP4F CONNECTORS

ON EACH FACE OF THE FRAME

6x HEADER.

INSTALLATION ON CURB

15# FELT OR EQUIVALENT MOISTURE BARRIER RECOMMENDED

#### (9)

OPTIONAL INSTALLATION WITH

HARDY FRAME BASE

ADJACENT FRAMING

**EXTENSION (HFBX) FOR** 



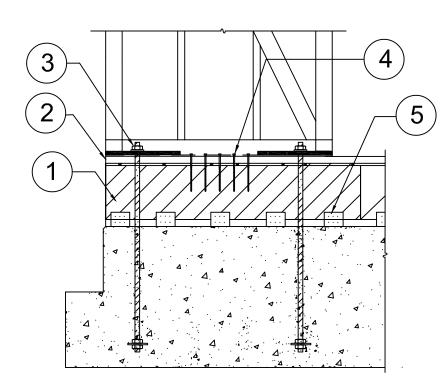
REVISIONS

BRACE

HFX

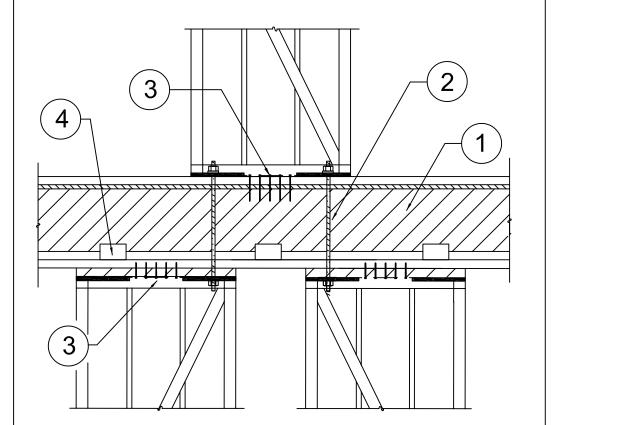
RAMING

THIS DETAIL SHEET IS NOT PROPRIETARY AND IS NOT REQUIRED FOR PLAN SUBMITTAL WITH MITEK  $^{\otimes}$  HARDY FRAME  $^{\otimes}$  PRODUCTS



- 4x MINIMUM RIM, ALLOWABLE VALUE TABLES ASSUME ENGINEERED WOOD PRODUCT WOOD PLATE BELOW BRACE FRAME
- NUTS AND WASHERS PER TABLE NOTE:
- 1/4" x 4-1/2" (MIN) WS SCREWS PER TABLE NOTE 3 USP MP4F CONNECTORS QUANTITY BY THE **DESIGN PROFESSIONAL**

RAISED-OS CORNER (4)



- 1. 4x (MIN) RIM, ALLOWABLE VALUE TABLES ASSUME **ENGINEERED WOOD PRODUCT**
- 2. 7/8" DIA. HOLD DOWN AND N&W PER TABLE NOTE 1 ARE PROVIDED IN HARDY FRAME® HFTC KIT
- 3. 1/4" x 4-1/2" (MIN) WS SCREWS, QUANTITY PER TABLE. 4. USP MP4F CONNECTORS, QUANTITY BY BUILDING **DESIGN PROFESSIONAL**

PYRAMID STACK

LOAD PATH FROM BEAM TO FOUNDATION AND CHECK

DESIGN PROFESSIONAL.

THAT PANEL DRIFT IS WITHIN CODE LIMIT BY BUILDING

DROP BEAM WITH FLOOR JOIST ABOVE PER PLAN.

2. 7/8" DIA. HOLD DOWN AND N&W PER TABLE NOTE 1

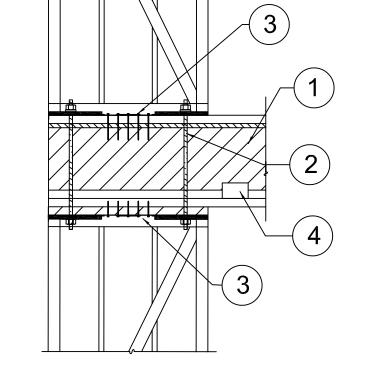
3. 1/4" x 4-1/2" (MIN) WS SCREWS, QUANTITY PER TABLE

SIZED PER BUILDING DESIGN PROFESSIONAL TO LIMIT

4. BEARING PLATE WASHER AT UNDERSIDE OF BEAM

CRUSHING FROM TENSION ANCHOR FORCES. 5. USP CONNECTORS BY DESIGN PROFESSIONAL

ARE PROVIDED IN HARDY FRAME® HFTC KIT.



4x MINIMUM RIM. ALLOWABLE VALUE TABLES

4. 1/4" x 4-1/2" (MIN) WS SCREWS PER TABLE NOTE 3

(3)

ASSUME ENGINEERED WOOD PRODUCT

NUTS AND WASHERS PER TABLE NOTE 1

5. USP MP4F CONNECTORS QUANTITY BY THE

RAISED FLOOR

**DESIGN PROFESSIONAL** 

WOOD PLATE BELOW BRACE FRAME

NOTE:

COUPLERS MAY BE USED WHEN THREADED ROD

IS SUBJECT TO TENSION LOADS ONLY.

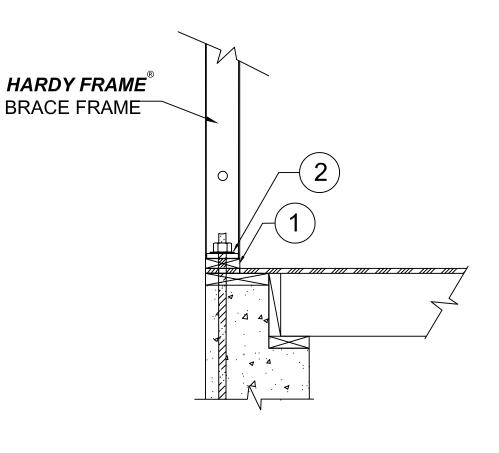
- 4x (MIN) RIM, ALLOWABLE VALUE TABLES ASSUME ENGINEERED WOOD PRODUCT
- 2. 7/8" DIA. HOLD DOWN AND N&W PER TABLE NOTE 1 ARE PROVIDED IN HARDY FRAME® HFTC KIT.
- 1/4" x 4-1/2" (MIN) WS SCREWS, QUANTITY PER TABLE. USP MP4F CONNECTORS, QUANTITY BY BUILDING DESIGN PROFESSIONAL

STACK @ OS CORNER (7)

LOAD PATH FROM BEAM TO FOUNDATION AND CHECK

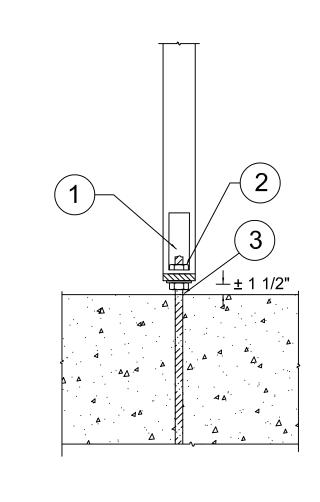
THAT PANEL DRIFT IS WITHIN CODE LIMIT BY BUILDING

DESIGN PROFESSIONAL.



- INSTALL BRACE FRAME ON 2x PLATE OVER SHEATHING
- 2. NUTS AND WASHERS PER TABLE NOTES 1 AND 2

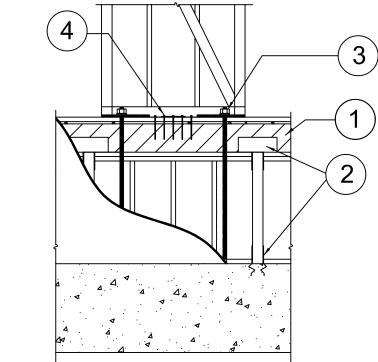
RAISED STEM WALL (2)



- ACCESS HOLE LOCATED AT EDGE OF POST NUTS AND WASHERS PER TABLE NOTE 1
- 3. PLUS OR MINUS 1-1/2" GAP TO BE FILLED WITH 5,000 PSI STRENGTH NON-SHRINK GROUT (MIN).







- 4x (MIN) RIM, ALLOWABLE VALUE TABLES ASSUME **ENGINEERED WOOD PRODUCT** 2. USP POST CAP AND POST BASE BY THE BUILDING
- **DESIGN PROFESSIONAL** NUTS AND WASHERS PER TABLE NOTE 1.
- 4. 1/4" x 4-1/2" (MIN) WS SCREWS, QUANTITY PER TABLE.

**CRIPPLE WALL** 

1. TENSION ANCHORS SPECIFIED AS STANDARD GRADE (STD) MUST COMPLY WITH ASTM F1554 GRADE 36 (OR EQUAL) TENSION ANCHORS SPECIFIED AS HIGH STRENGTH (HS) MUST COMPLY WITH ASTM A 193 GRADE B7 (OR EQUAL). TENSION ANCHORS (BOTH GRADES) CONNECT TO THE UPPER AND LOWER BRACE FRAMES WITH HARDENED ROUND WASHERS AND GRADE 8 NUTS. ALTERNATE WASHERS ARE (2 EA) ROUND-FLAT OR (2 EA) SAE WASHERS AT EACH ANCHOR CONNECTION. ALTERNATE NUTS ARE 2H HEAVY HEX. 2. 1/4" DIAMETER MITEK<sup>®</sup> PRO SERIES<sup>™</sup> WS SCREWS. LENGTH IS 3" (MINIMUM) WHEN

Top

Screw<sup>2</sup>

Qty (ea)

**Bottom** 

Screw <sup>3</sup>

Qty (ea)

32" Width =  $10 \mid 32$ " Width = 10

44" Width = 14 | 44" Width = 14

Screw Qty

Edges (ea)

Available at

**Hold Down** 

7/8

DEPTH | Diameter 1

ATTACHING DIRECTLY TO THE COLLECTOR AND 4-1/2" (MINIMUM) WHEN INSTALLING A 2x FILLER ABOVE THE BRACE FRAME. 3. 1/4" DIAMETER MITEK® PRO SERIES™ WS SCREWS. LENGTH IS 4-1/2" (MINIMUM) AT

CONNECTIONS TO FLOOR SYSTEMS AND BEAMS BELOW

INSTALLATION ON FLOOR SYSTEM INSTRUCTIONS

**NET** 

HEIGHT

(in)

92-1/4

104-1/4

116-1/4

128-1/4

140-1/4

152-1/4

MODEL

NUMBER

HFX-32x8

HFX-44x8

HFX-32x9

HFX-44x9

HFX-32x10

HFX-44x10

HFX-32x11

HFX-44x11

HFX-32x12

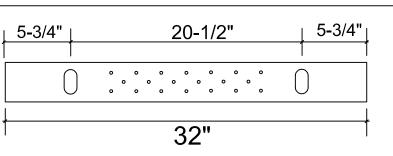
HFX-44x12

HFX-32x13

HFX-44x13

- 1. WITH HOLES PRE-DRILLED FOR 7/8" DIA.TENSION ANCHORS, INSTALL A SOLID 4x (MINIMUM) RIM IN FLOOR SYSTEM AT BRACE FRAME LOCATION. ALLOWABLE VALUE TABLES ASSUME THE RIM IS ENGINEERED WOOD PRODUCT (EWP).
- AFTER FLOOR SHEATHING, CUT AND PLOT THE BOTTOM PLATE OR THE PLATE CAN BE CONTINUOUS. 3. INSTALL THE FRAME ON THE WOOD PLATE AND SECURE ANCHORS WITH HARDENED ROUND
- WASHERS AND GRADE 8 NUTS TO BE SNUG TIGHT.
- WHEN STACKING FRAMES, CONNECT THE LOWER FRAME TO THE UPPER FRAME WITH TENSION ANCHORS (GRADE PER PLANS) AND SECURE AT BOTH ENDS WITH HARDENED ROUND WASHERS AND GRADE 8 NUTS TO BE SNUG TIGHT. HARDY FRAME® BRACE FRAMES AND POSTS (HFP) INCLUDE PLATE WASHERS PRE-WELDED IN THE TOP AND BOTTOM CHANNELS
- 5. INSTALL 1/4"x4-1/2" (MIN) MITEK<sup>®</sup> PRO SERIES™ SCREWS THROUGH THE BOTTOM CHANNEL. SEE TABLE FOR MINIMUM QUANTITY.
- WHEN JOINTS IN FRAMING MEMBERS OCCUR AT SCREW LOCATIONS. INSTALL ADDITIONAL SCREWS.
- 7. FOR STANDARD WALL HEIGHTS. INSTALL 1/4"x3" (MIN) MITEK® PRO SERIES™ WS SCREWS THROUGH THE TOP CHANNEL INTO THE COLLECTOR. SEE TABLE FOR MINIMUM QUANTITIES

NOTE: INSTALLATIONS MAY VARY WITH JOB SPECIFIC CONDITIONS AND/OR SPECIFICATIONS BY THE DESIGN PROFESSIONAL.



6-1/2"

32" BRACE FRAME

44" BRACE FRAME

#### HOLE PATTERN TOP & BOTTOM



- STEEL BEAM PER PLAN 2. 7/8" DIA.HOLD DOWN AND N&W PER TABLE NOTE 1 ARE PROVIDED IN HARDY FRAME HFTC KIT
- PLATE WASHER AT UNDERSIDE OF STEEL BEAM IF SPECIFIED BY THE BUILDING DESIGN PROFESSIONAL

LOAD PATH FROM BEAM TO FOUNDATION AND CHECK THAT PANEL DRIFT IS WITHIN CODE LIMIT BY BUILDING **DESIGN PROFESSIONAL** 

6

4x (MIN) RIM, ALLOWABLE VALUE TABLES ASSUME

2. 7/8" DIA, HOLD DOWN AND N&W PER TABLE NOTE 1

3. 1/4" x 4-1/2" (MIN) WS SCREWS, QUANTITY PER TABLE

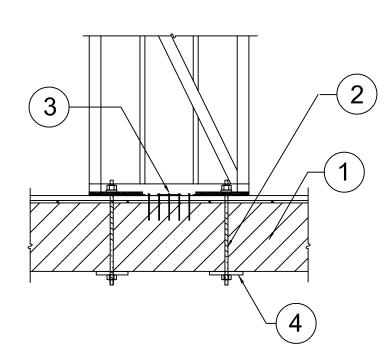
USP MP4F CONNECTORS, QUANTITY BY BUILDING

ARE PROVIDED IN HARDY FRAME®HFTC KIT.

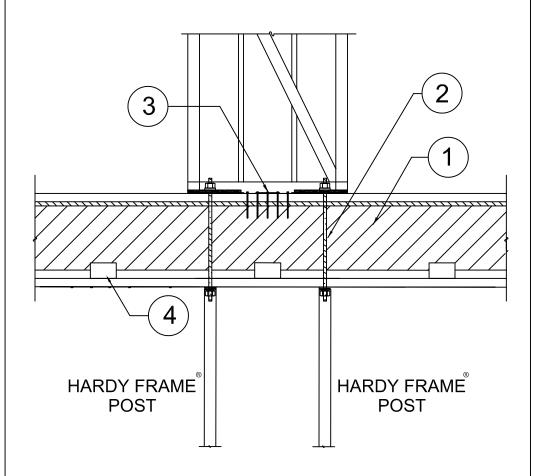
STRAIGHT STACK

ENGINEERED WOOD PRODUCT

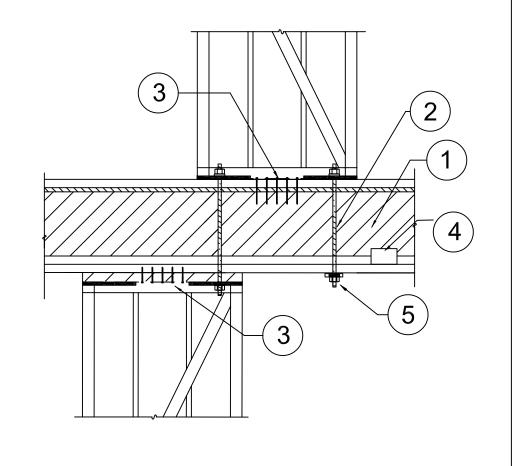
**DESIGN PROFESSIONAL** 



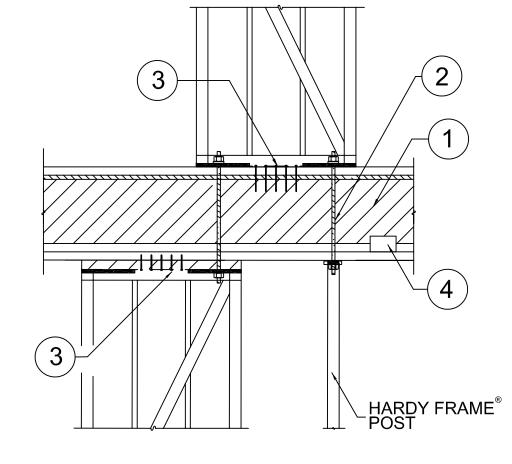
- WOOD BEAM PER PLAN.
- 7/8" DIA. HOLD DOWN AND N&W PER TABLE NOTE 1 ARE PROVIDED IN HARDY FRAME® HFTC KIT.
- 1/4" x 4-1/2" (MIN) WS SCREWS, QUANTITY PER TABLE BEARING PLATE WASHER AT UNDERSIDE OF BEAM SIZED PER BUILDING DESIGN PROFESSIONAL TO LIMIT CRUSHING FROM TENSION ANCHOR FORCES



- 4x (MIN) RIM, ALLOWABLE VALUE TABLES ASSUME ENGINEERED WOOD PRODUCT.
- 2. 7/8" DIA. HOLD DOWN AND N&W PER TABLE NOTE 1 ARE PROVIDED IN HARDY FRAME®HFTC KIT 1/4" x 4-1/2" (MIN) WS SCREWS, QUANTITY PER TABLE
- USP MP4F CONNECTORS, QUANTITY BY BUILDING DESIGN PROFESSIONAL



- 1. 4x (MIN) RIM, ALLOWABLE VALUE TABLES ASSUME ENGINEERED WOOD PRODUCT.
- 2. 7/8" DIA. HOLD DOWN AND N&W PER TABLE NOTE 1 ARE PROVIDED IN HARDY FRAME® HFTC KIT
- 1/4" x 4-1/2" (MIN) WS SCREWS, QUANTITY PER TABLE USP MP4F CONNECTORS, QUANTITY BY BUILDING **DESIGN PROFESSIONAL**
- BEARING PLATE WASHER AT UNDERSIDE OF BEAM SIZED PER PER BUILDING DESIGN PROFESSIONAL TO LIMIT CRUSHING FROM TENSION ANCHOR FORCES.



- 1. 4x (MIN) RIM, ALLOWABLE VALUE TABLES ASSUME **ENGINEERED WOOD PRODUCT**
- 2. 7/8" DIA. HOLD DOWN AND N&W PER TABLE NOTE 1 ARE PROVIDED IN HARDY FRAME® HFTC KIT.
- 1/4" x 4-1/2" (MIN) WS SCREWS, QUANTITY PER TABLE 4. USP MP4F CONNECTORS, QUANTITY BY BUILDING **DESIGN PROFESSIONAL**

REVISIONS DATE

BRACE EMS S

B

DATE: 1-1-2023

DROP BM - FL SYSTEM 14 STEEL BM THRU-BOLT 13 WOOD BM THRU-BOLT 12

HFP POSTS BELOW (11) STAGGERED THRU-BOLT(10) STAGGERED-HFP POST (9)