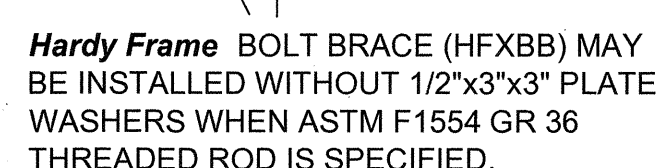
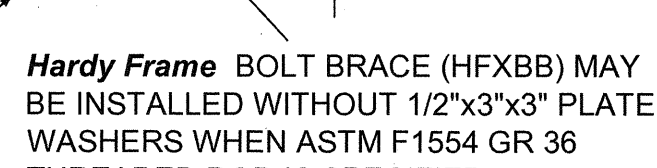


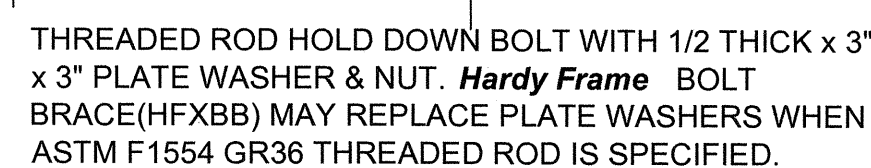
**HARDY FRAME HFX-SERIES PANEL**  
ON WOOD SILL



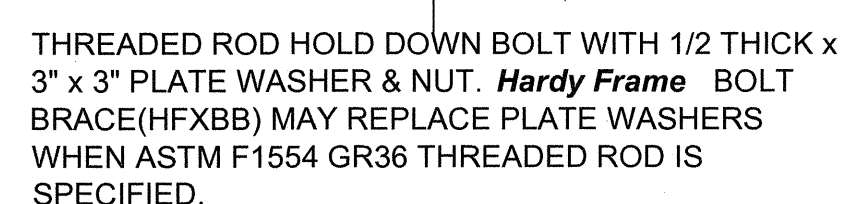
**HARDY FRAME HFX-SERIES PANEL**  
ON NUT & WASHER (DOUBLE NUT)



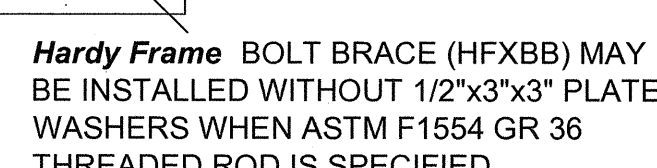
**HARDY FRAME HFX-SERIES PANEL**  
ON FOUNDATION



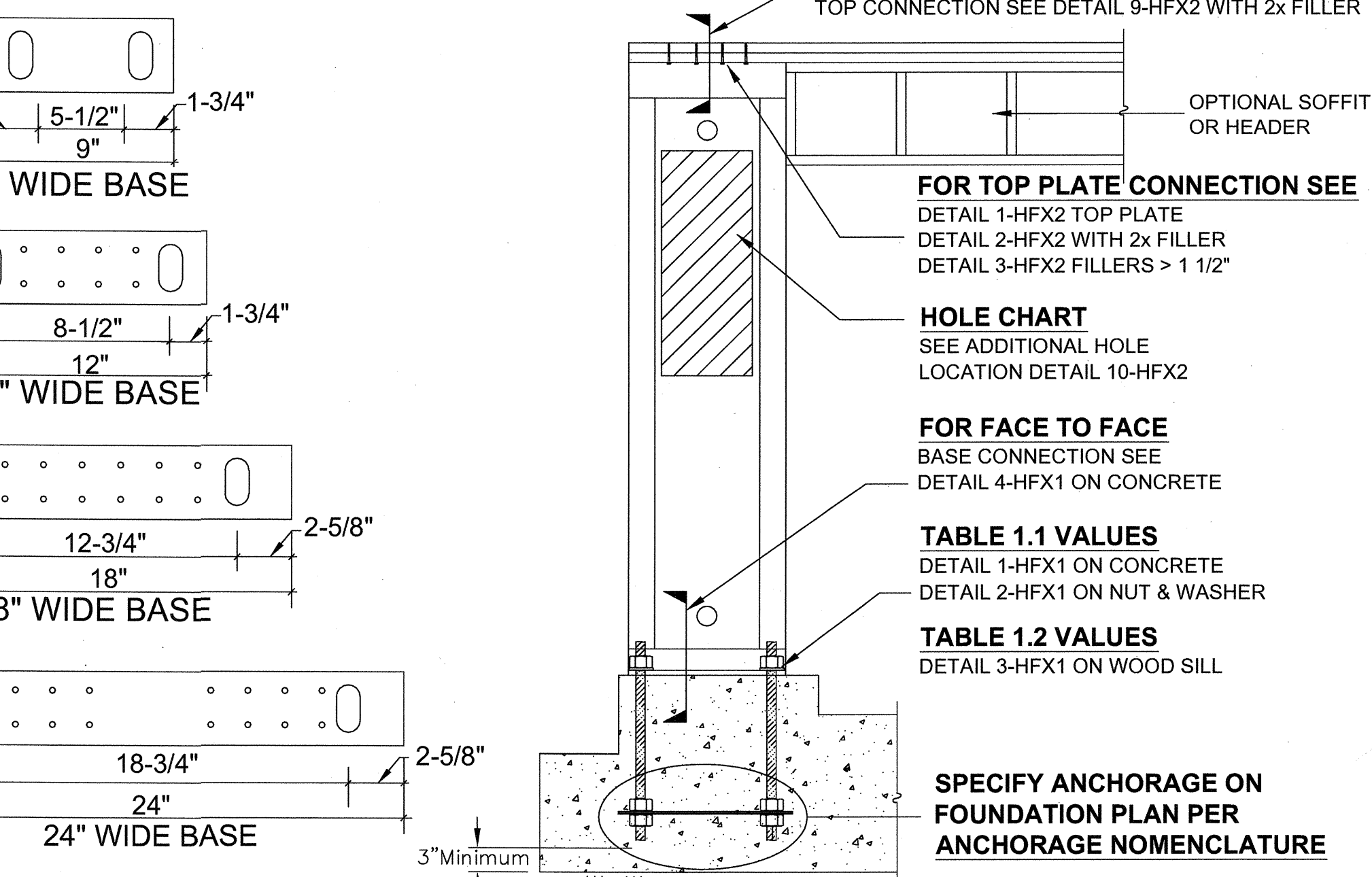
HARDY FRAME HFX-SERIES POST  
ON NUT & WASHER (DOUBLE NUT)



HARDY FRAME HFX-SERIES POST  
ON FOUNDATION



**HARDY FRAME HFX-SERIES PANEL**  
**ON FOUNDATION - FACE TO FACE CONDITION**

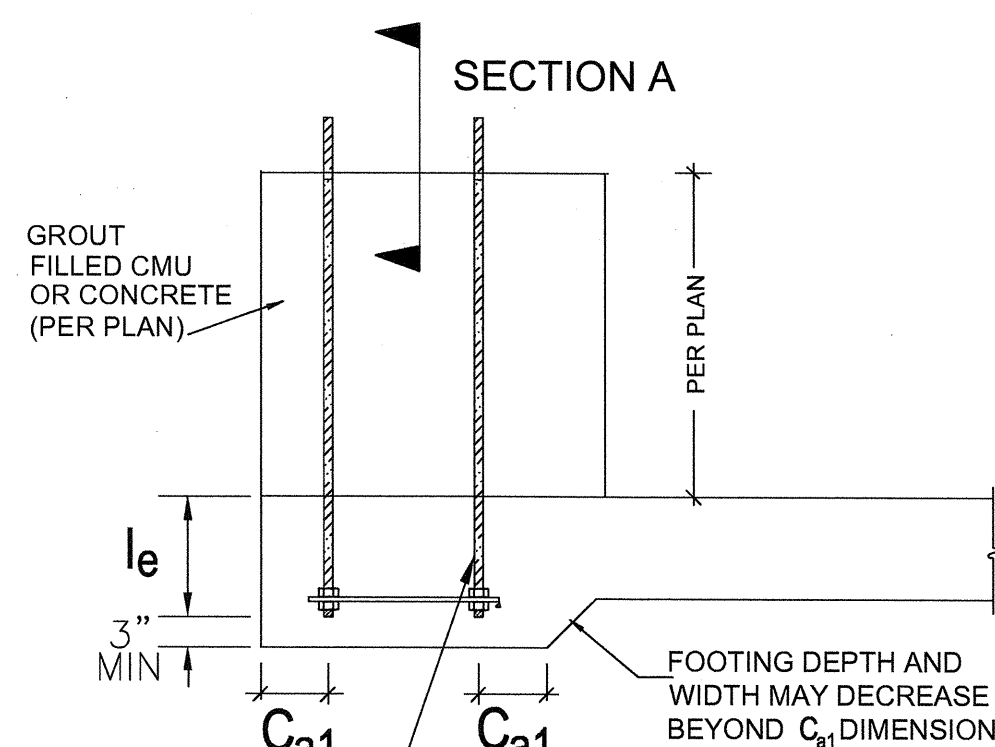


## DETAIL SPECIFICATION GUIDE

Product Width (in)	Max. Height (ft)	Anchorage (See Nomenclature for Description)		Shear Tie		
				Quantity		Length L <sub>1</sub> (in)
		STD	HS	STD	HS	
9	8	1-1/8 STD 12-17	NA	1	1	7-1/2
12	10	1-1/8 STD 14-20	1-1/8 HS 14-20			10-1/2
18	13	NA	1-1/8 HS 20-30			15
	20	1-1/8 HS 13-20				
24	13	1-1/8 STD 14-20	1-1/8 HS 20-30	2	21	
	20	NA	1-1/8 HS 18-27			

- 1) Applies to 2500 psi compressive strength concrete, both seismic and wind loading.
- 2) STD indicates rods complying with ASTM F1554 Grade 36 with a **Half Frame** Bolt Brace (HFXB) double nutted on the embed end.
- 3) HS indicates rods complying with ASTM A 193 Grade B7 (or equal) with a 1/2x3x3 plate washer double nutted on the embed end. HFXB is recommended.
- 4) Concrete edge distance must comply with ACI-318-08 D8.2.
- 5) Installation on curbs or stemwalls must be 6 inch width minimum, and require supplemental shear reinforcement per ACI-318-08,  $f_c=2500$  psi.
- 6) Shear Ties are #3 rebar, grade 60 (min.)
- 7) Shear Ties are not required for installations away from Foundation Edge, for installation on wood framing or for Braced Wall Panel applications.
- 8) Foundation Design is by others
- 9) The Building Design Professional is permitted to modify these details to accommodate a specific condition.

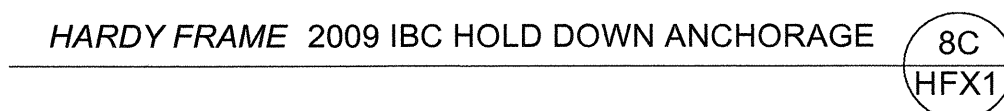
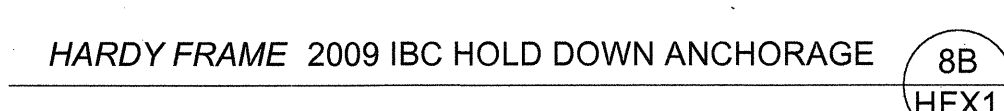
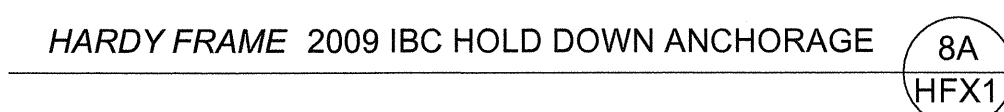
**HARDY FRAME 2009 IBC HOLD DOWN ANCHORAGE TABLE**



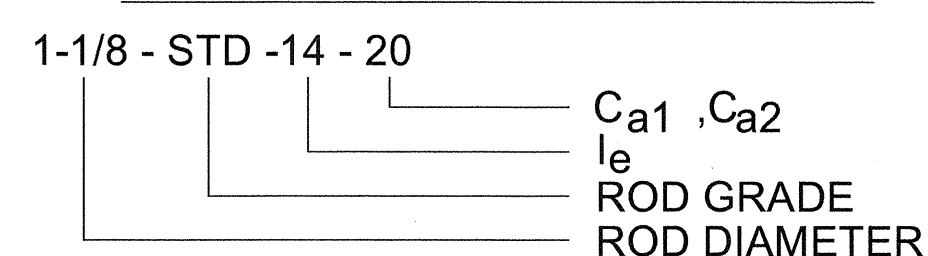
THREADED ROD HOLD DOWN ANCHOR WITH 1/2x3x3  
PLATE WASHER & NUT. **Hardy Frame** BOLT  
BRACE(HFXBB) MAY REPLACE PLATE WASHERS  
WHEN ASTM F 1554 GRADE 36 THREADED ROD IS  
SPECIFIED.

NOTE: COUPLING NUTS MAY BE USED TO EXTEND THREADED ROD LENGTH THROUGH STEM WALL

HARDY FRAME ANCHORAGE AT STEM WALL  
STEM WALL ELEVATION



## ANCHORAGE NOMENCLATURE



$I_e$  = LENGTH OF EMBED  
 $C_{a1}$ ,  $C_{a2}$  = END & EDGE DISTANCE