

Section 6: Construction Details

6.1 Hebel AAC Block Units – Typical Sections:

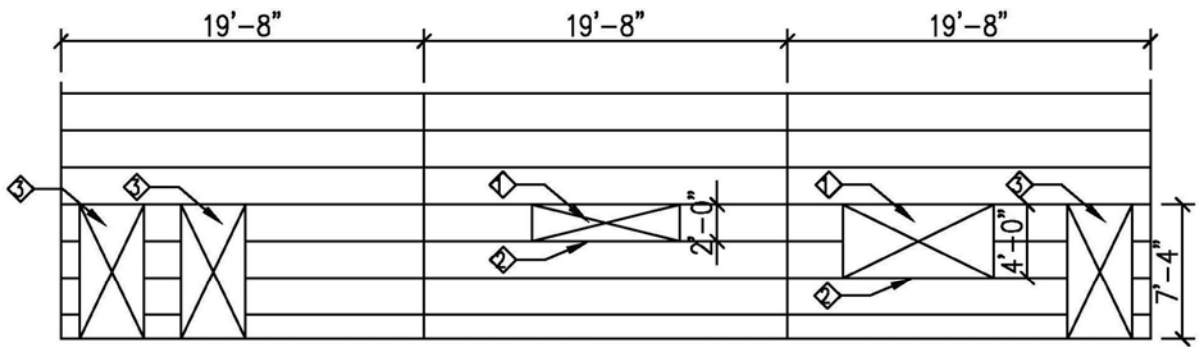
Figure 6.1: Exterior Wall @ Slab on Grade	3
Figure 6.2: Section at Masonry Stem Wall	4
Figure 6.3: Section at Turndown Slab	5
Figure 6.4: Section at Turndown Slab w/Brick.....	6
Figure 6.5: Section at Exterior Wall (Reinf. Loc.)	7
Figure 6.6: Floor Panel @ Concrete Wall.....	8
Figure 6.7: Section at Interior Wall Footing	9
Figure 6.8: Section at Thickened Slab.....	10
Figure 6.9: Section at Flr. Pnl. Span Transition (Block).....	11
Figure 6.10: Section at Flr./Rf. Panels - End Brg (Block)	12
Figure 6.11: Tie Beam at Bearing Wall.....	13
Figure 6.12: Tie Beam at Bearing Wall (Floor Joists).....	14
Figure 6.13: Ring Beam at Non-Bearing Wall.....	15
Figure 6.14: Ring Beam at Bearing Wall	16
Figure 6.15: Ring Beam w/Metal Floor Connection.....	17
Figure 6.16: Typical Corner/Intersection Detail	18
Figure 6.17: Intersection of AAC Panels/Blocks	19
Figure 6.18: Single Family Home Shear Wall.....	20
Figure 6.19: Interior Load Bearing Wall @ Bond Beam	21
Figure 6.20: Wood Nailer @ Finished Opening.....	22
Figure 6.21: Load Bearing Wall @ Hebel Lintel	23
Figure 6.22: Hebel AAC Block @ Gable End	24

6.2 Hebel AAC Reinforced Panels – Typical Sections:

Figure 6.23: Section at Exterior Wall (Typical)	25
Figure 6.24: Section at Interior Wall (Typical).....	26
Figure 6.25: Section at Exterior Wall (Reinf. Loc.)	27
Figure 6.26: Section at Flr. Pnl. Span Transition (Panel)	28
Figure 6.27: Section at Flr./Rf. Panels - End Brg. (Panel).....	29
Figure 6.28: Ring Beam/Joint Detail	30
Figure 6.29: Lintel Panel Detail.....	31
Figure 6.30: Corner Detail.....	32
Figure 6.31: Plan Details - Vertical Panel Intersections	33
Figure 6.32: Anchoring of Vertical Wall Panels	34
Figure 6.33: Vertical Wall Panel at Steel Column.....	35
Figure 6.34: Vertical Wall Panel at Steel Beam.....	36
Figure 6.35: Typical Reinforced Wall Panel Joint.....	37
Figure 6.36: Suggested Vertical Panel Layout	38
Figure 6.37: Horizontal Wall Panel at Steel Column	39
Figure 6.38: Horizontal Wall Detail	40
Figure 6.39: Horizontal Wall Corner Detail	41
Figure 6.40: Horizontal Wall Panel at C.I.P. Column.....	42

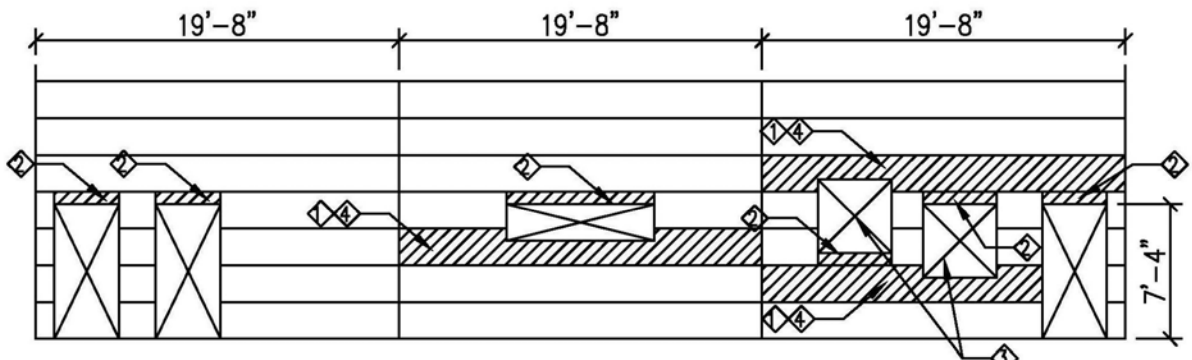
6.3 Hebel AAC – Miscellaneous Details:

Figure 6.41: Suggested Horizontal Panel Layout	43
Figure 6.42: Typical Steel Frame Detail	44
Figure 6.43: Suspended Ductwork/Plumbing Details	45
Figure 6.44: Opening Detail with Steel Headers	46
Figure 6.45: Electric Service at AAC Block Wall w/Plaster.....	47
Figure 6.46: Plumbing Wall	48



Horizontal Panel Layout - (Recommended)

- 1 WINDOW HEIGHTS DESIGNED AT 2'-0" INCREMENTS
- 2 WINDOW SILL HEIGHTS AT PANEL JOINTS
- 3 DOOR HEIGHTS AT PANEL JOINTS
- 4 WALL SYSTEMS MUST BE DESIGNED TO ALLOW FOR PROPER LOAD TRANSFER AT OPENINGS/PANEL DISCONTINUITIES. STRUCTURAL SUPPORT FRAMING AT OPENING AND ADDITIONAL SUPPORT BRACING SHOULD BE PROVIDED AS REQUIRED BY DESIGN



Horizontal Panel Layout - (Not Recommended)

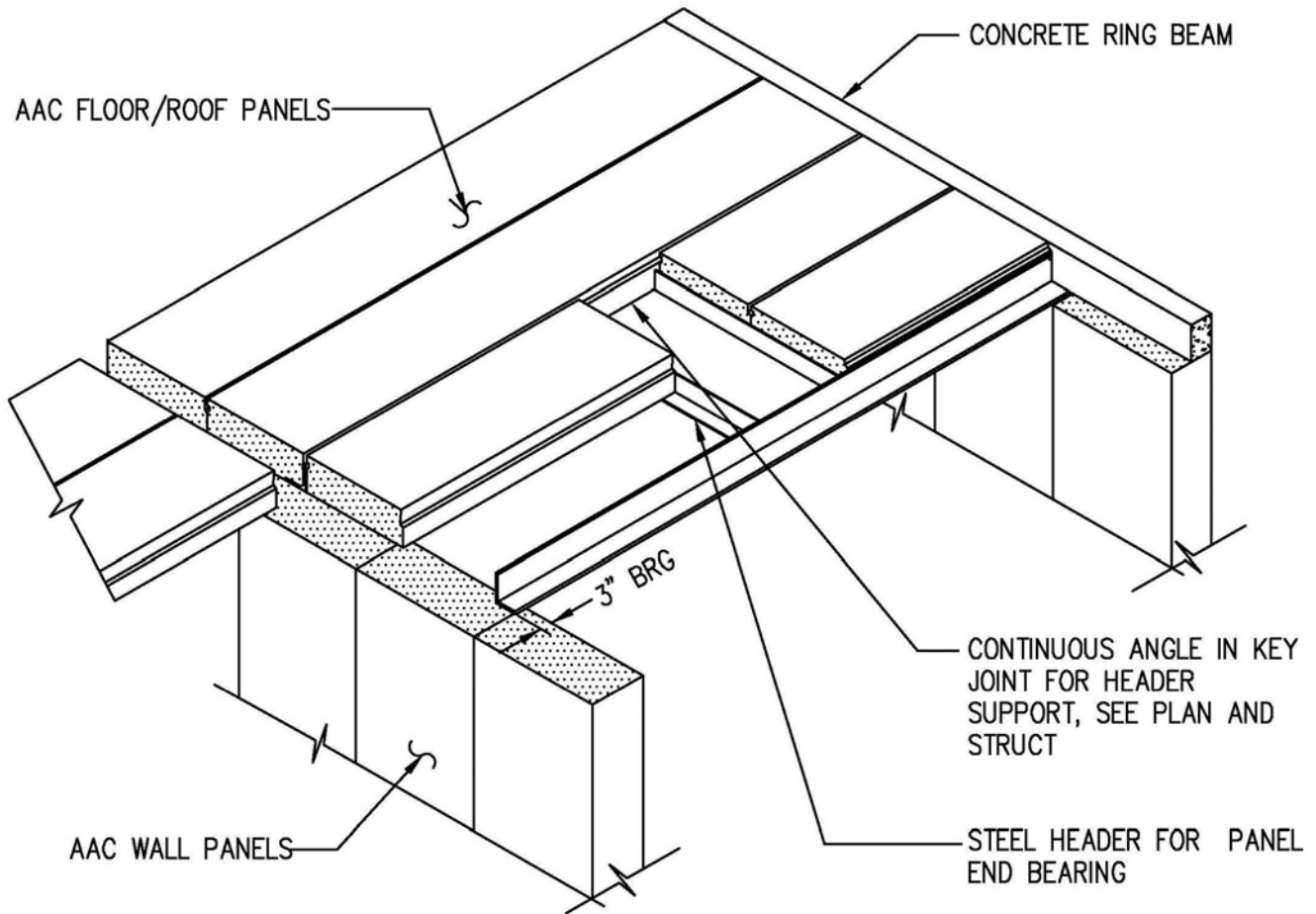
- 1 ADDITIONAL COST FOR FIELD CUTTING PANELS
- 2 ADDITIONAL INFILL MATERIAL (COST AND LABOR)
- 3 ADDITIONAL LABOR COST FOR STAGGERED WINDOW HEIGHTS
- 4 REQUIRES ADDITIONAL STEEL BRACING
- 5 WALL SYSTEMS MUST BE DESIGNED TO ALLOW FOR PROPER LOAD TRANSFER AT OPENINGS/PANEL DISCONTINUITIES. STRUCTURAL SUPPORT FRAMING AT OPENING AND ADDITIONAL SUPPORT BRACING SHOULD BE PROVIDED AS REQUIRED BY DESIGN

SUGGESTED HORIZONTAL PANEL LAYOUT

SCALE: 3/4"=1'-0" (U.N.O.)

Figure 6.41: Suggested Horizontal Panel Layout

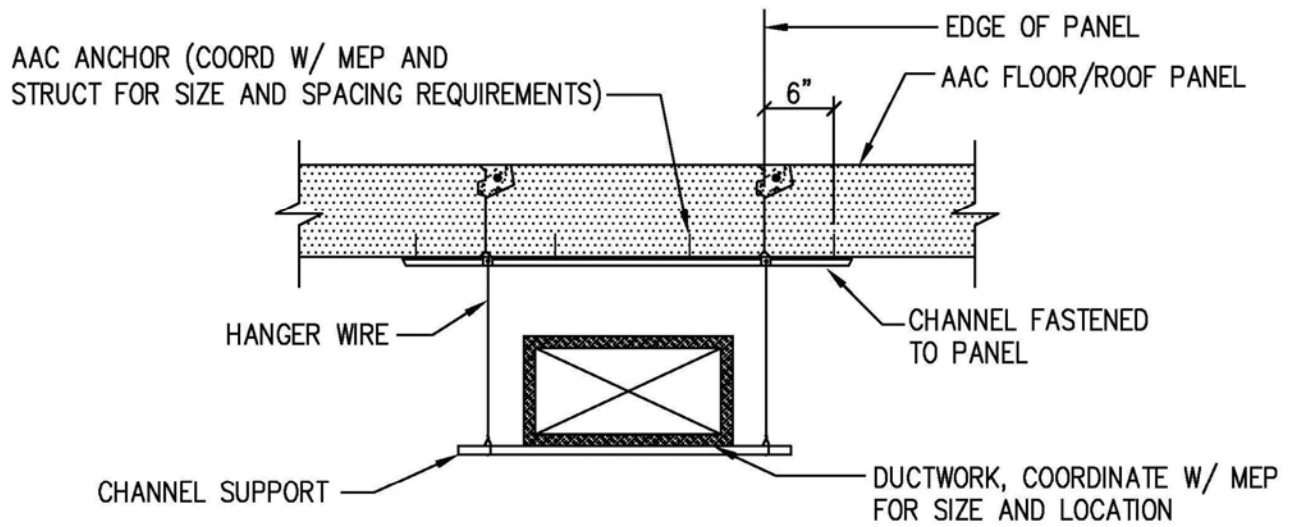
6.3 Hebel AAC – Miscellaneous Sections:



TYPICAL STEEL FRAME DETAIL

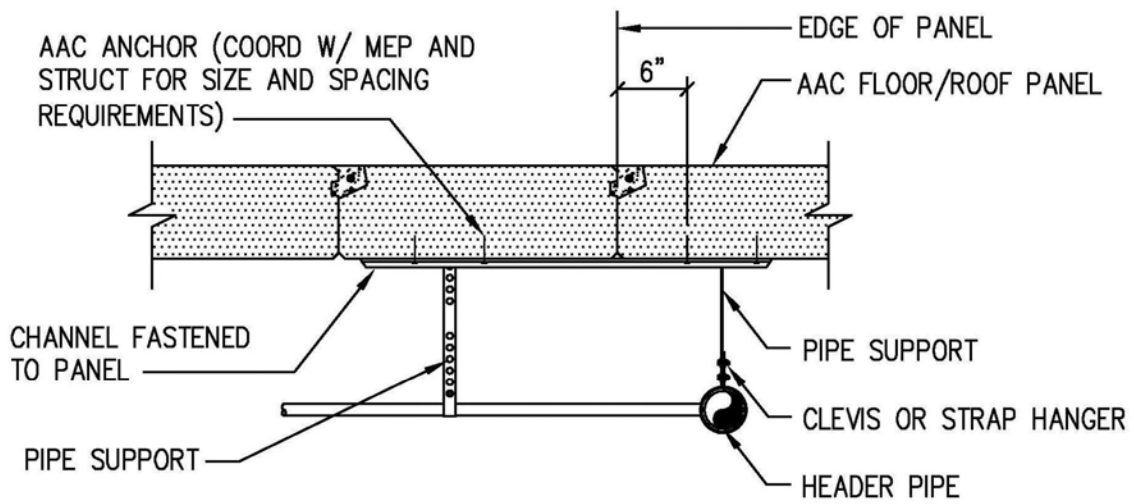
SCALE: 3/4"=1'-0" (U.N.O.)

Figure 6.42: Typical Steel Frame Detail



SUSPENDED DUCTWORK

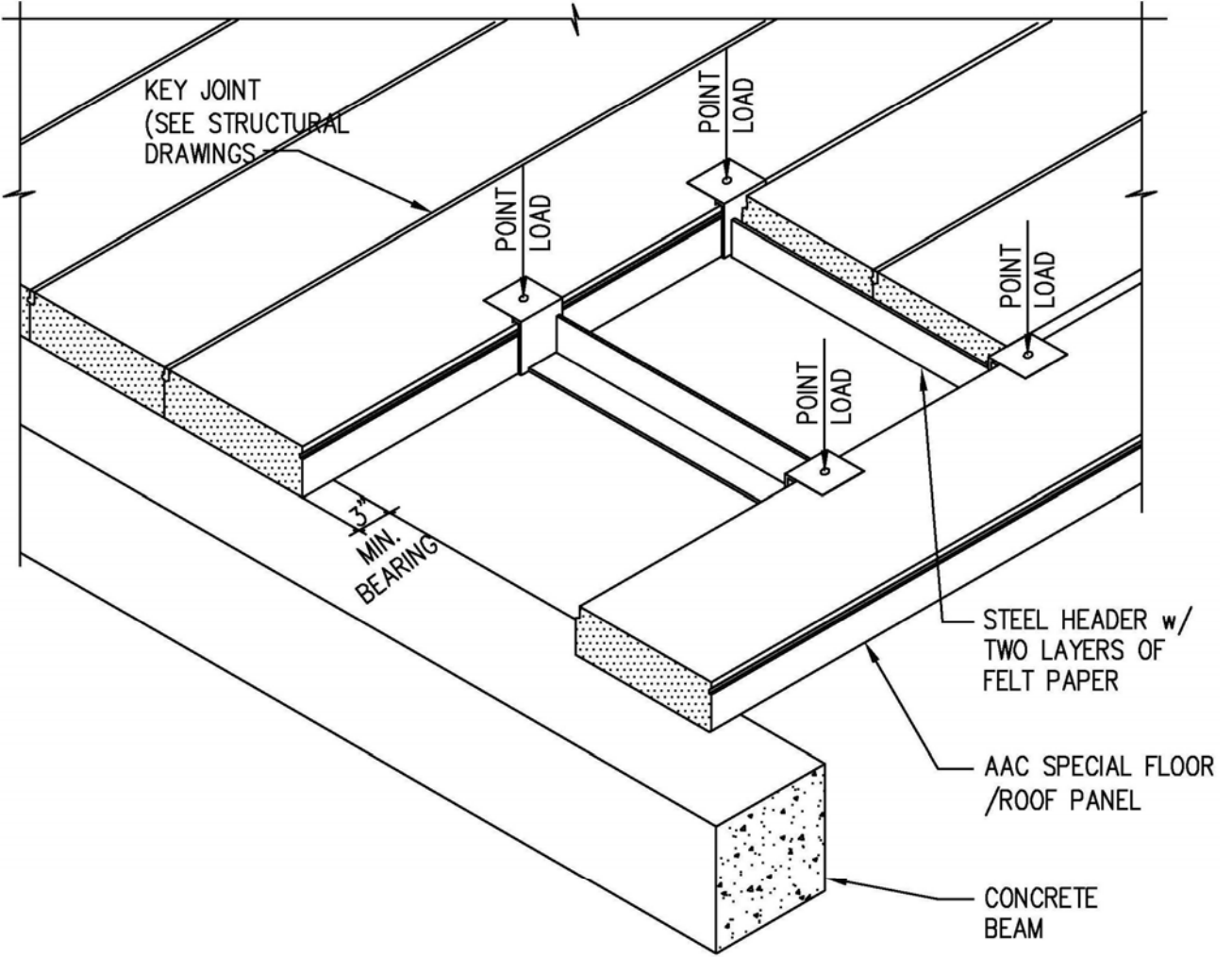
SCALE: 3/4"=1'-0" (U.N.O.)



SUSPENDED PLUMBING

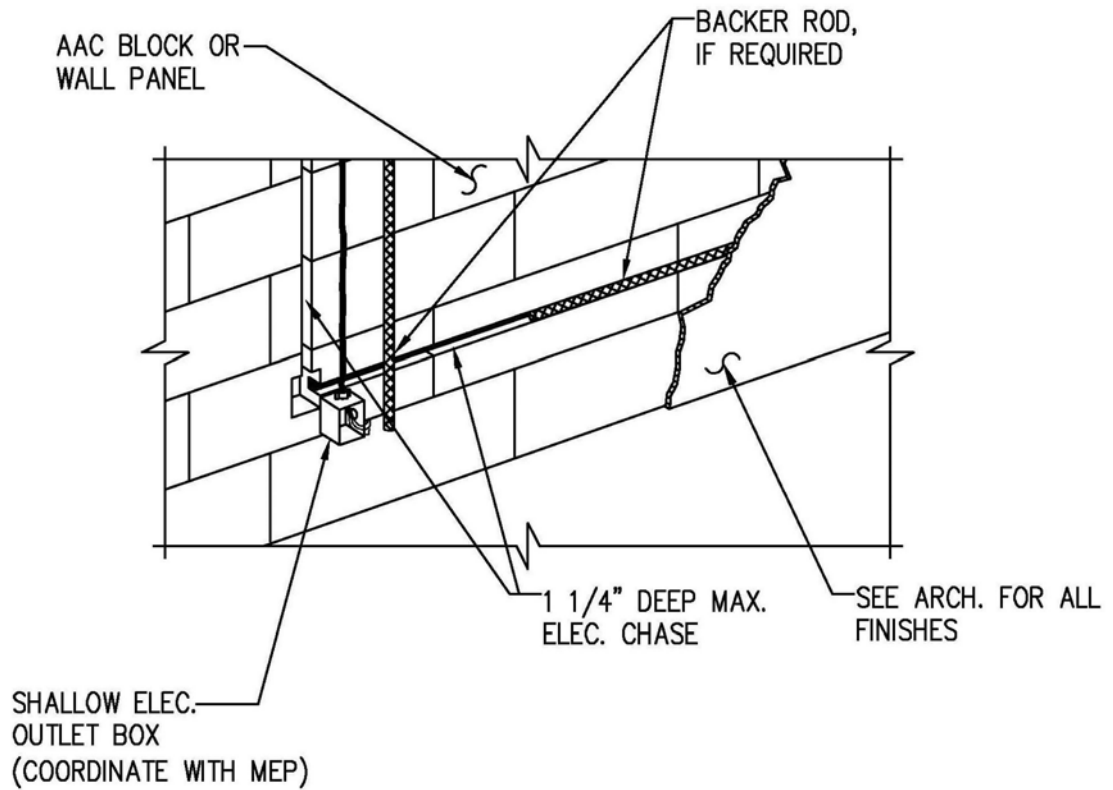
SCALE: 3/4"=1'-0" (U.N.O.)

Figure 6.43: Suspended Ductwork/Plumbing Details



OPENING DETAIL WITH STEEL HEADERS
 SCALE: 3/4"=1'-0" (U.N.O.)

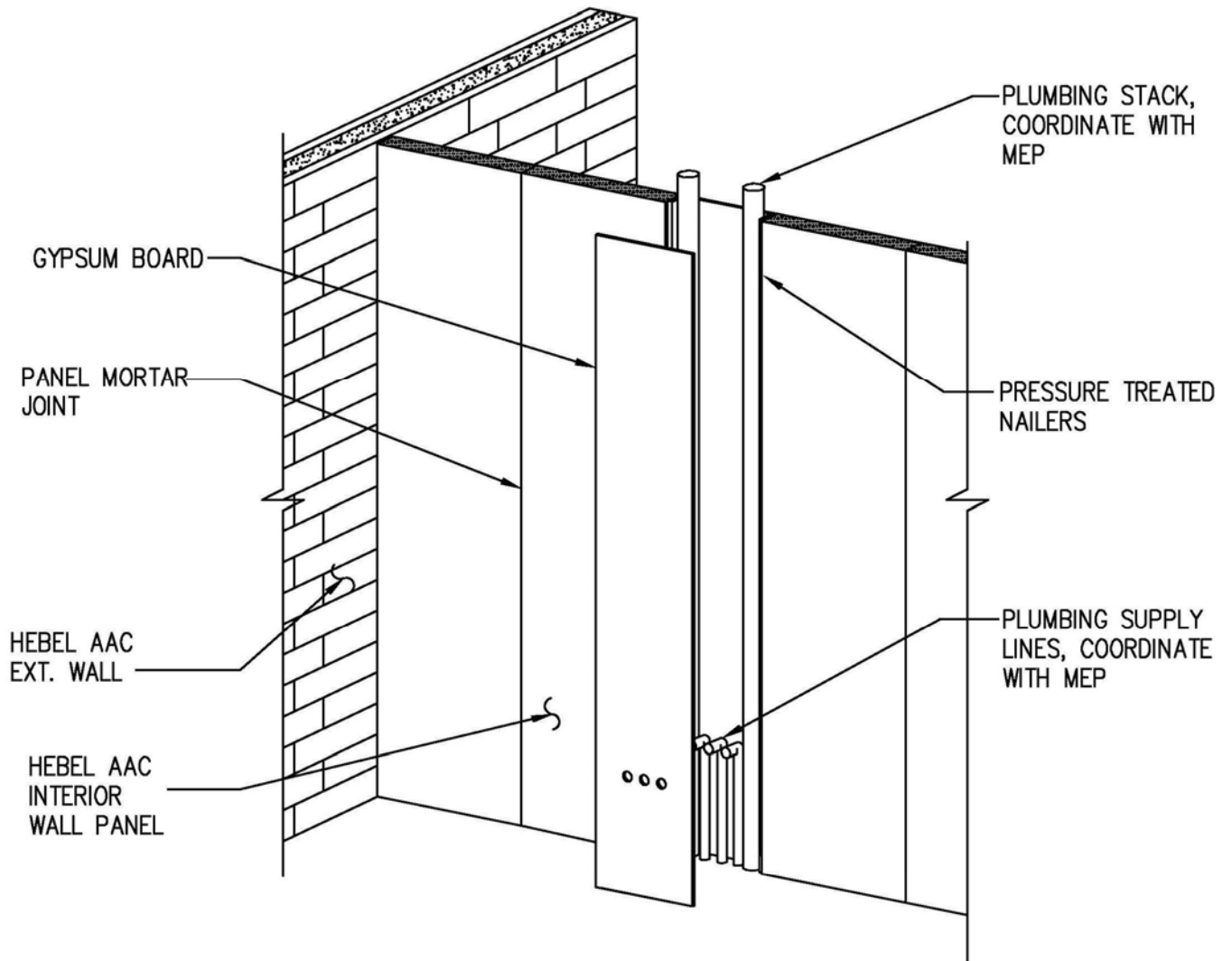
Figure 6.44: Opening Detail with Steel Headers



ELEC. SERV. AT AAC BLOCK WALL W/ PLASTER

SCALE: 3/4"=1'-0" (U.N.O.)

Figure 6.45: Electric Service at AAC Block Wall w/Plaster



PLUMBING WALL

SCALE: 3/4"=1'-0" (U.N.O.)

Figure 6.46: Plumbing Wall