



Introduction

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Thermal Properties

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Acoustic Insulation

Moisture Absorption

Environmental

Structural Design

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Tools/Fasteners

Wall Finishes

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Energy Efficient • Acoustical Insulation • Fire Resistant • Pest Resistant • Environmentally Friendly



## Standard Foundation Details

Exterior AAC-Block Wall at Monolithic Footing

Exterior AAC-Block Wall at CMU Stem Wall and Concrete Footing

Typical Interior AAC-Block Wall Footing

Typical AAC-Block Column

Elevation - AAC Wall Reinforcing at Openings

Elevation - AAC Lintel Detail

Elevation – AAC with wide Flange Steel Lintel Bearing

## Standard Beams and Trusses Details

Prefabricated Wood Truss Bearing at AAC Block Wall

Wall Brace at AAC Block Wall

Prefabricated Wood Truss at AAC Block Wall 1

Prefabricated Wood Truss at AAC Block Wall 2

Prefabricated Wood Truss at AAC Block Wall 3

Wood "I" Joist at AAC Block Wall 1

Wood "I" Joist at AAC Block Wall 2

Wood "I" Joist at AAC Block Wall 3

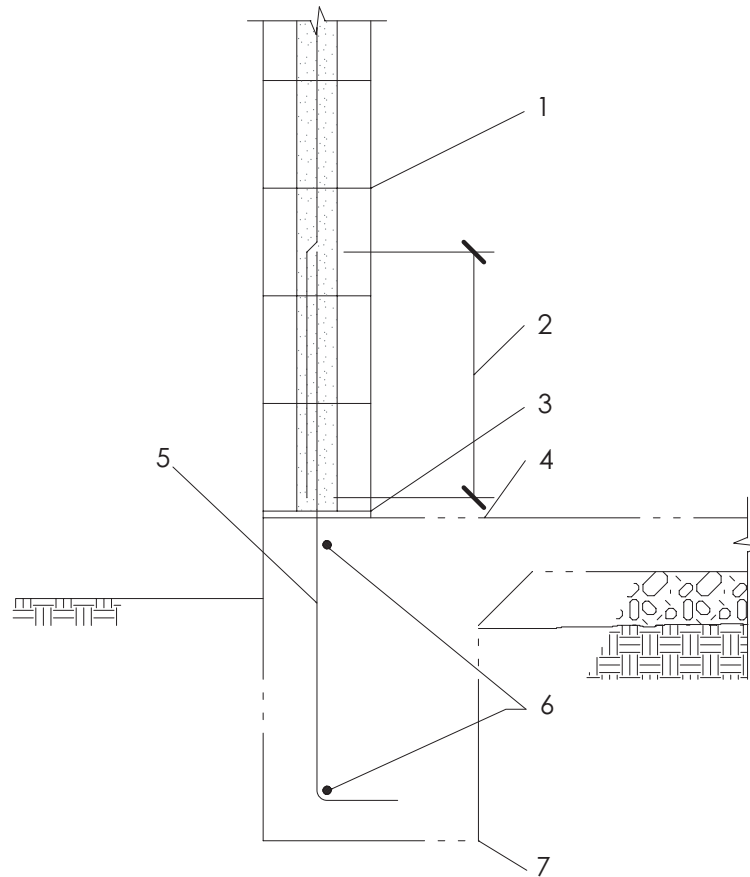
Interior AAC Block Wall at Wood "I" Joist

Typical Ledger Bolt Detail at AAC Wall

Wood Beam at AAC Block Wall 1

Wood Beam at AAC Block Wall 2

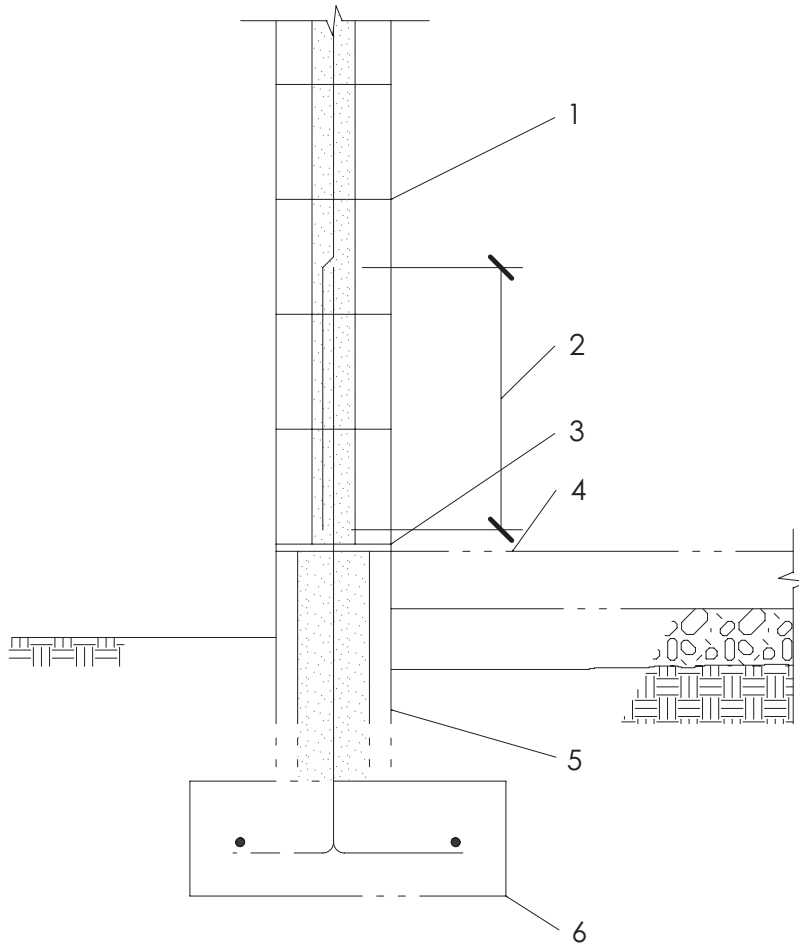
Top of AAC Wall Connection at Prefabricated Wood Truss



#### DETAIL KEY NOTES

- 1 AAC Block wall with vertical wall reinforcing in solid grouted cells where shown on plans
- 2 Bar lap =  $40 \times \text{bar } \varnothing$  - min
- 3 3/8" Type "M" or "S" leveling mortar bed
- 4 Concrete slab - by others
- 5 Reinforcing - by others
- 6 Dowels to match and lap vertical wall reinforcing
- 7 Concrete footing - by others

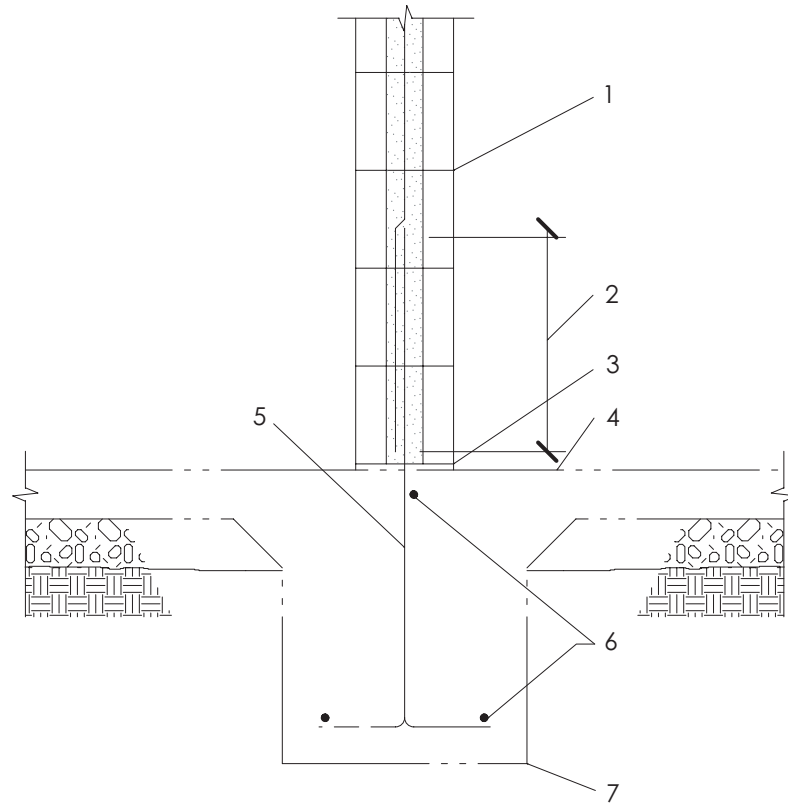
TYPICAL EXTERIOR AAC BLOCK WALL @ MONOLITHIC FOOTING



## DETAIL KEY NOTES

- 1 AAC Block wall with vertical wall reinforcing in solid grouted cells where shown on plans
- 2 Bar lap =  $40 \times \text{bar } \varnothing$  - min
- 3 3/8" Type "M" or "S" leveling mortar bed
- 4 Concrete slab - by others
- 5 CMU Stem wall - by others
- 6 Concrete footing - by others

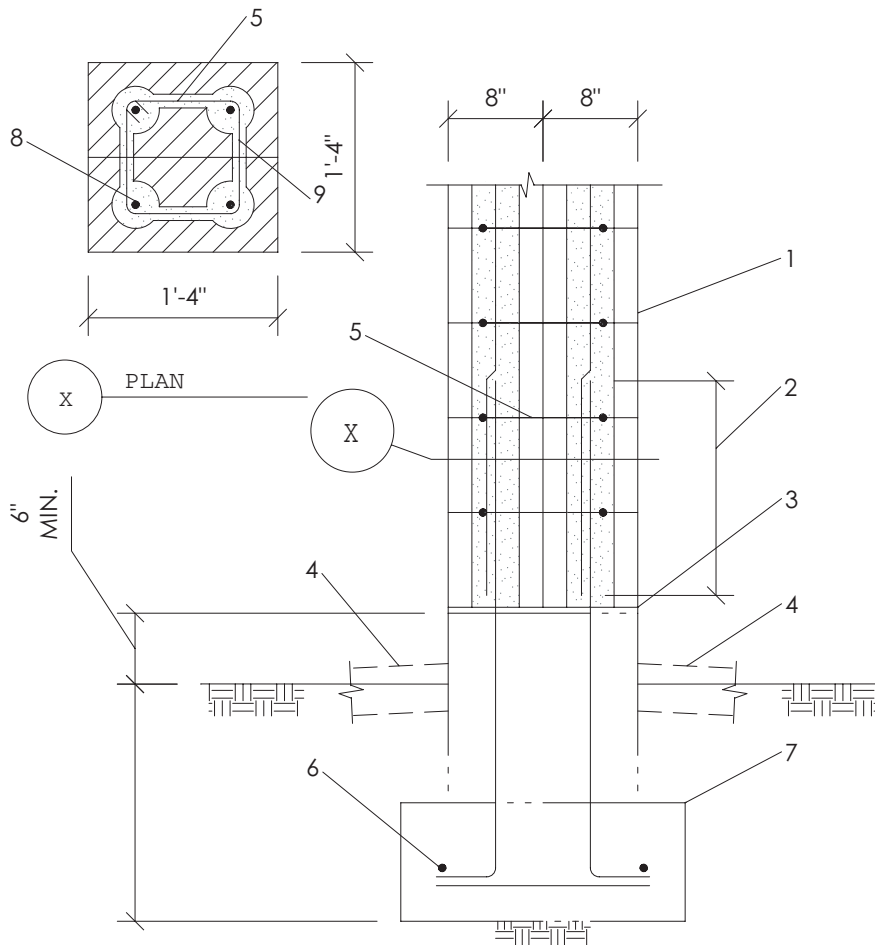
TYPICAL EXTERIOR AAC BLOCK WALL  
@ CMU STEM WALL AND CONCRETE FOOTING



#### DETAIL KEY NOTES

- 1 AAC Block wall with vertical wall reinforcing in solid grouted cells where shown on plans
- 2 Bar lap =  $40 \times \text{bar } \varnothing$  - min
- 3 3/8" Type "M" or "S" leveling mortar bed
- 4 Concrete slab - by others
- 5 Reinforcing - by others
- 6 Dowels to match and lap vertical wall reinforcing
- 7 Concrete footing - by others

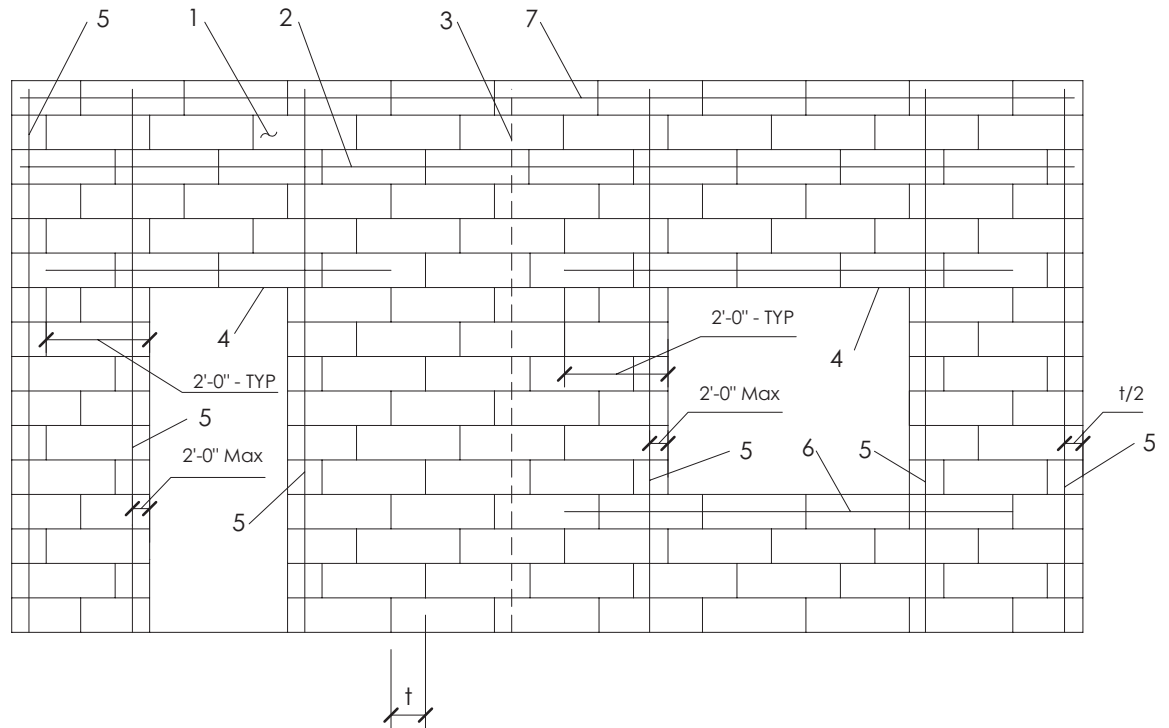
TYPICAL INTERIOR AAC BLOCK WALL @ MONOLITHIC FOOTING



## DETAIL KEY NOTES

- 1 AAC block wall with vertical wall reinforcing in solid grouted cells where shown on plans
- 2 Bar lap = 40 x bar diameter minimum
- 3 3/8" Type "M" or "S" leveling mortar bed
- 4 Concrete slab where shown on plans - by others
- 5 #2 ties at 8" o.c.
- 6 Footing reinforcing
- 7 Concrete footing - by others
- 8 4 #4 Vertical column reinforcing centered in 4"  $\varnothing$  solid grouted cell
- 9 Cut a 3/4" x 3/4" channel fill with thinbed mortar and place stirrups

16" SQUARE AAC COLUMN AT CONCRETE FOOTING



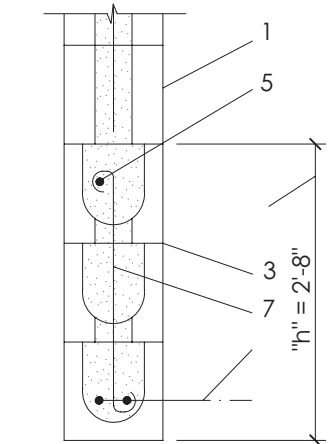
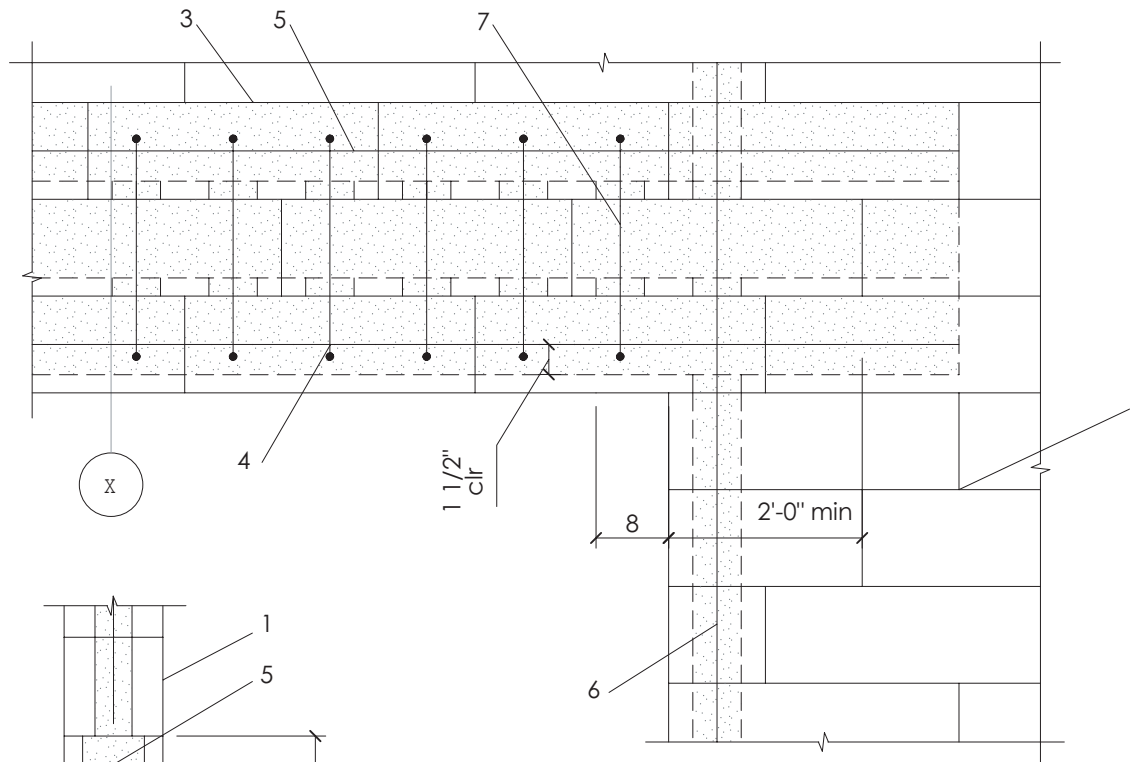
#### DETAIL KEY NOTES

- 1 AAC Block wall
- 2 2 #4 Horizontal reinforcing in AAC "U" block - typ at roof line u.n.o. on plans
- 3 Additional vertical wall reinforcing where shown on plans
- 4 AAC block lintel - see plans and AAC block lintel schedule
- 5 1 #4 Centered in 4"  $\emptyset$  cell vertical wall reinforcing within 24" of each end of wall opening - typ u.n.o. on plans
- 6 1 #4 Horizontal reinforcing in solid grouted AAC "U" block - extend 24" past each end of opening
- 7 1 #4 Horizontal reinforcing in solid grouted AAC "U" block at top of parapet

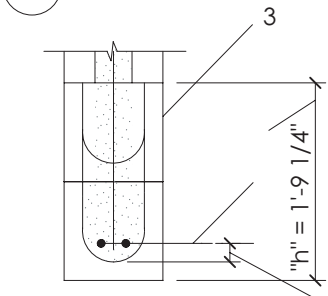
#### NOTE:

1.  $\dagger$  = WALL THICKNESS.
2. ALL CELLS WITH VERTICAL REINFORCING TO BE SOLID GROUTED.
3. AAC BLOCK TO LAP A DISTANCE OF  $\dagger$ .

ELEVATION - AAC BLOCK WALL REINFORCING AT OPENINGS



X SECTION - TYPE B



X SECTION - TYPE A

ELEVATION - AAC LINTEL DETAIL

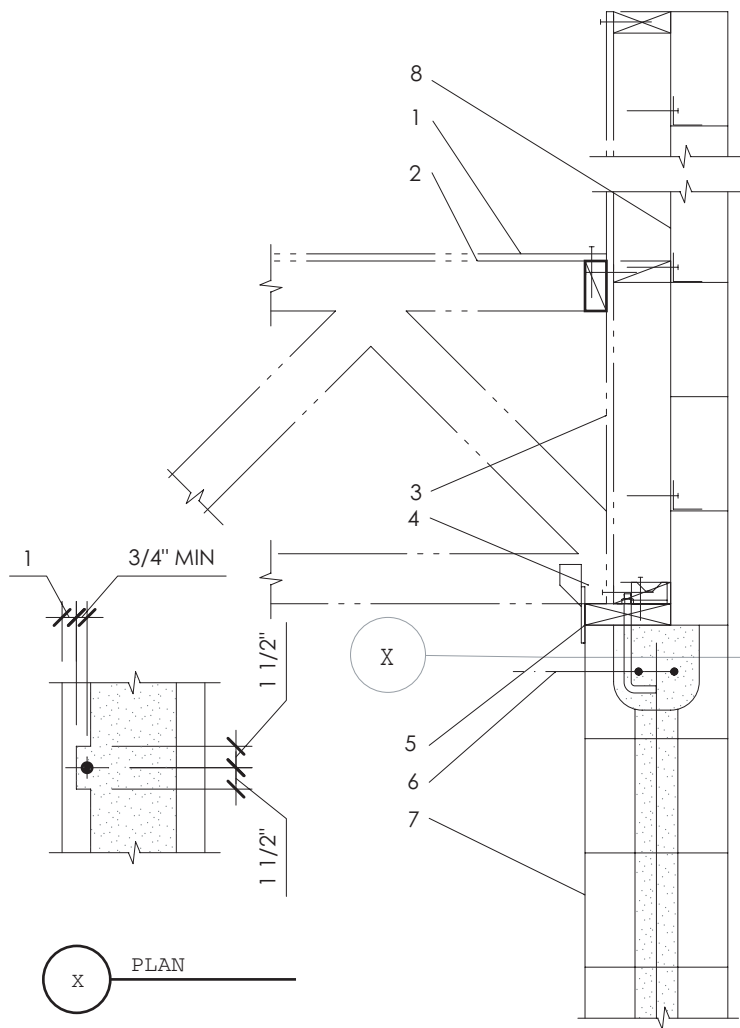
### DETAIL KEY NOTES

- 1 AAC block wall with vertical reinforcing in solid grouted cells where shown on plans
- 2 "h" - AAC Lintel depth - see AAC lintel schedule
- 3 AAC "U" block with 4" Ø holes at 12" o.c. for continuous grout flow - typ
- 4 Bottom lintel reinforcing - extend 24" past each end of opening
- 5 Top lintel reinforcing - extend 24" past each end of opening
- 6 Vertical jamb reinforcing in 4" Ø solid grouted cells - see plans
- 7 Stirrups as required - see AAC lintel schedule

### Notes:

1. All grouted cells and bond beams to be mechanically vibrated- see general notes.
2. Contractor to provide clean-out at bottom of lintels greater than 16" deep - provide 2" Ø holes at 4'-0" o.c. to ensure continuous grout in lintel.

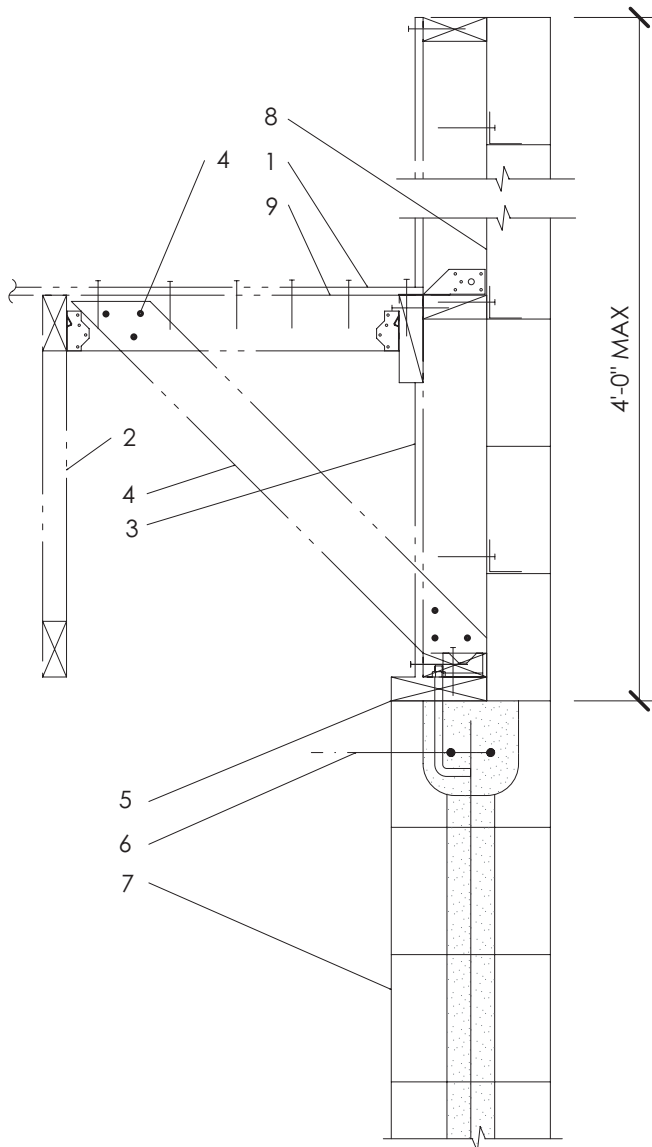




DETAIL KEY NOTES

- 1 Roof sheathing
- 2 Prefabricated wood roof truss with integrated wood parapet to support 4" AAC veneer
- 3 Wood shear panel blocking
- 4 Simpson framing anchor at each truss
- 5 Wood plate with anchor bolt
- 6 2 #4 Continuous reinforcing in solid grouted AAC "U" block
- 7 AAC block wall with vertical wall reinforcing in solid grouted cells where shown on plans u.n.o.
- 8 4" AAC parapet wall with 16 gauge corrugated veneer ties at 24" o.c. each way screwed to parapet wood truss

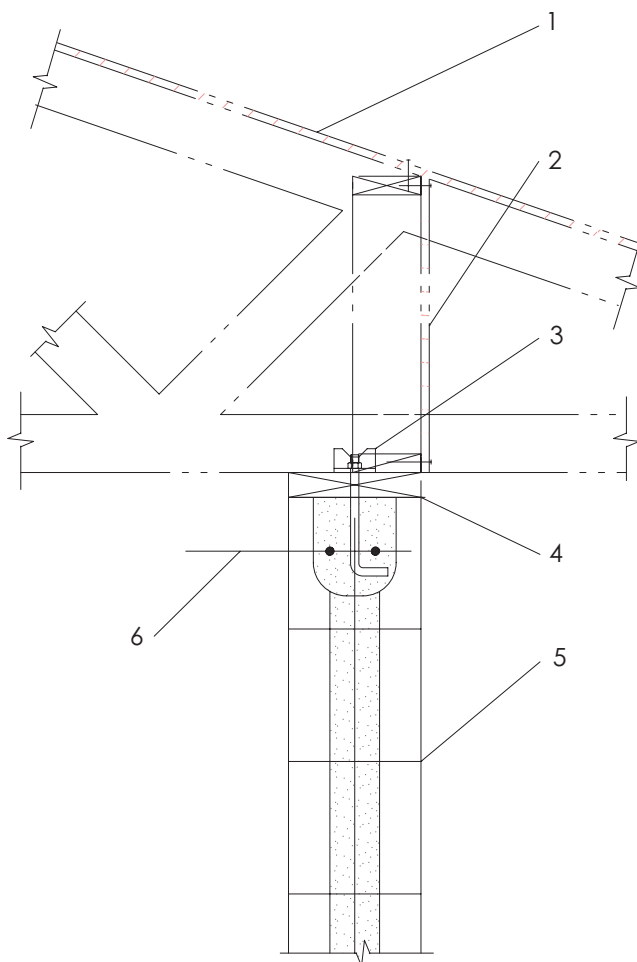
PREFABRICATED WOOD TRUSS BEARING @ AAC BLOCK WALL



### DETAIL KEY NOTES

- 1 Roof
- 2 Prefabricated wood roof truss
- 3 Wood stud wall with 3/8" plywood sheathing
- 4 Wall brace
- 5 Wood plate with anchor bolts - by others
- 6 2 #4 Continuous reinforcing in solid grouted AAC "U" block
- 7 AAC block wall with vertical wall reinforcing in solid grouted cells where shown on plans u.n.o.
- 8 4" AAC parapet wall with 16 gauge corrugated brick veneer ties at 24" o.c. each way screwed to wood stud wall with 2 #10 x 2" long wood screws
- 9 2 x blocking

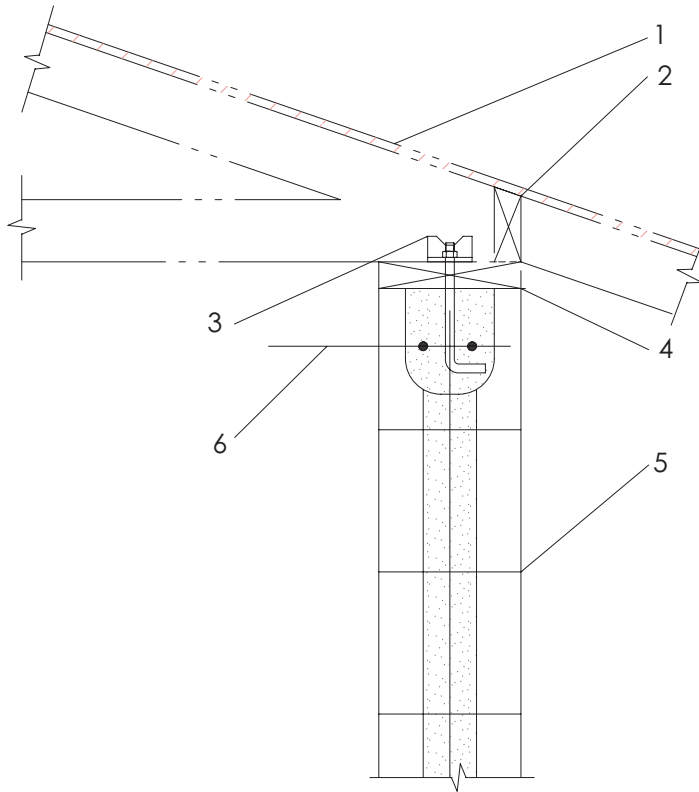
WALL BRACE AT AAC BLOCK WALL



#### DETAIL KEY NOTES

- 1 Roof sheathing and prefabricated wood trusses - by others
- 2 Shear panel blocking - by others
- 3 Framing anchors at each truss
- 4 Wood plate with anchor bolts - by others
- 5 AAC Block wall with vertical wall reinforcing in solid grouted cells where shown on plans
- 6 2 #4 Continuous horizontal reinforcing in solid grouted AAC "U" block

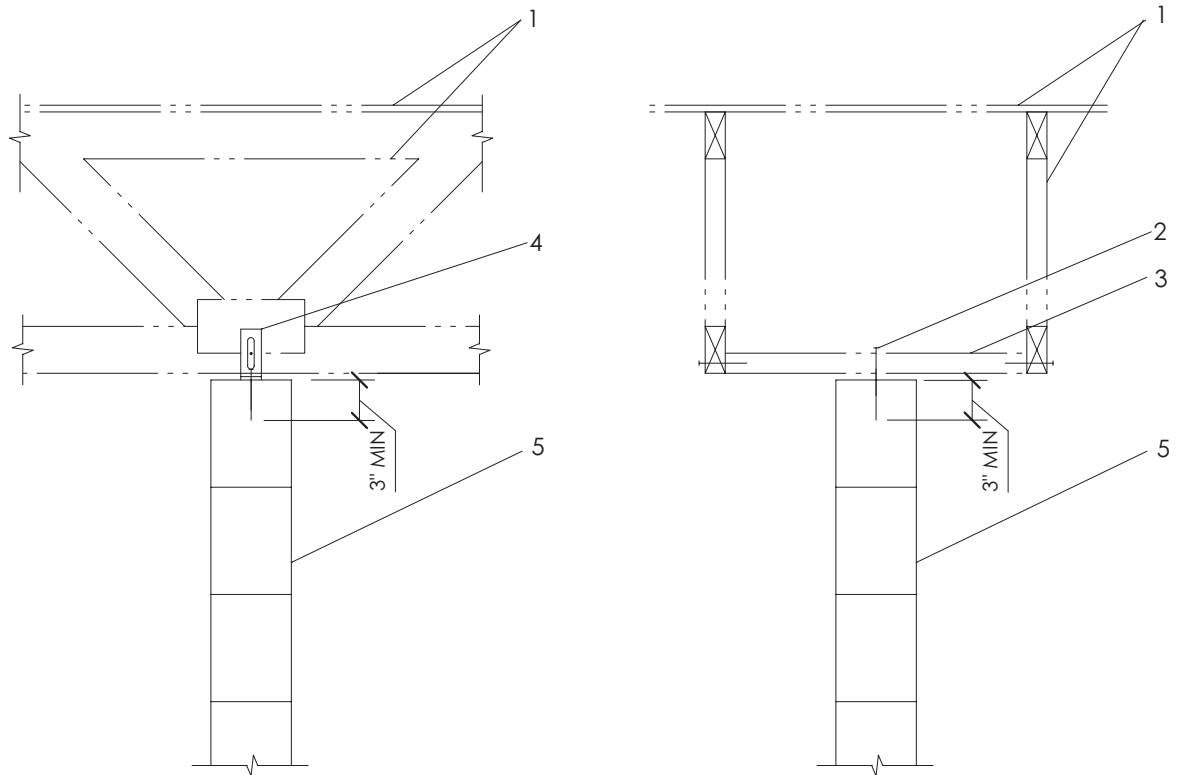
PREFABRICATED WOOD TRUSS BEARING @ AAC BLOCK WALL



## DETAIL KEY NOTES

- 1 Roof sheathing and prefabricated wood trusses - by others
- 2 2 X Blocking - by others
- 3 Framing anchors at each truss - by others
- 4 3 x Plate with 5/8"  $\varnothing$  anchor bolts at 32" o.c.
- 5 AAC Block wall with vertical wall reinforcing in solid grouted cells where shown on plans
- 6 2 #5 Continuous horizontal reinforcing in solid grouted AAC "U" block

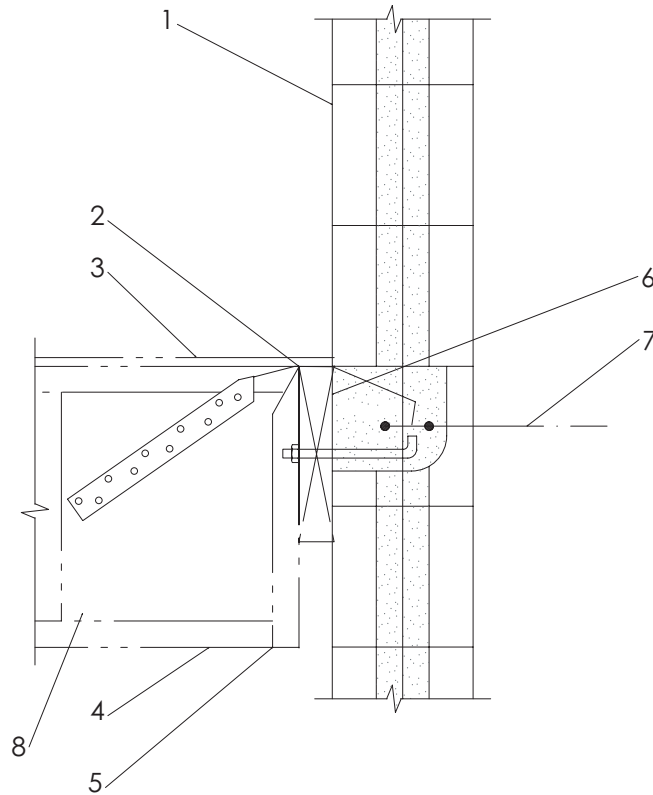
PREFABRICATED WOOD TRUSS BEARING @ AAC BLOCK WALL



#### DETAIL KEY NOTES

- 1 Sheathing and roof framing - by others
- 2 3/16" Coarse threaded screws at each block/clip
- 3 2 X 4 Flat blocking at 24" o.c. with 2 - 16d nailed at each end
- 4 Simpson DTC clip at each truss
- 5 AAC Block wall

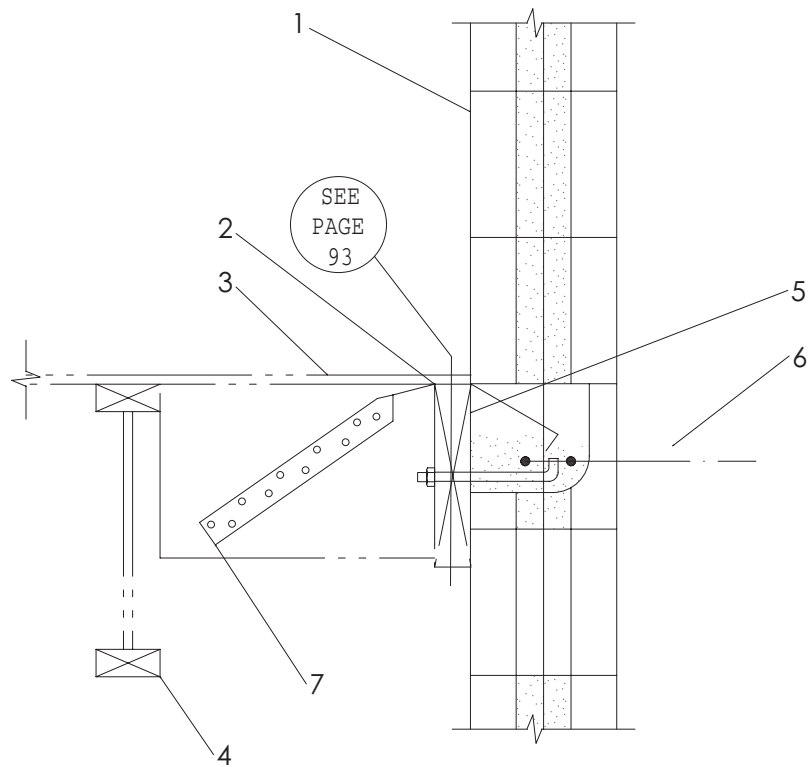
TYPICAL TOP OF AAC WALL CONNECTION  
AT PREFABRICATED WOOD TRUSS



## DETAIL KEY NOTES

- 1 AAC block wall with vertical reinforcing in solid grouted cells where shown on plan
- 2 Wood ledger with anchor bolts - by others
- 3 Plywood
- 4 Prefabricated wood "I" joists or wood joist - by others
- 5 Wood joist
- 6 Notch AAC "U" block 4" at each ledger bolt - see typical ledger bolt detail
- 7 2 #4 Continuous horizontal reinforcing in solid grouted AAC "U" block
- 8 Simpson wall strap - by others

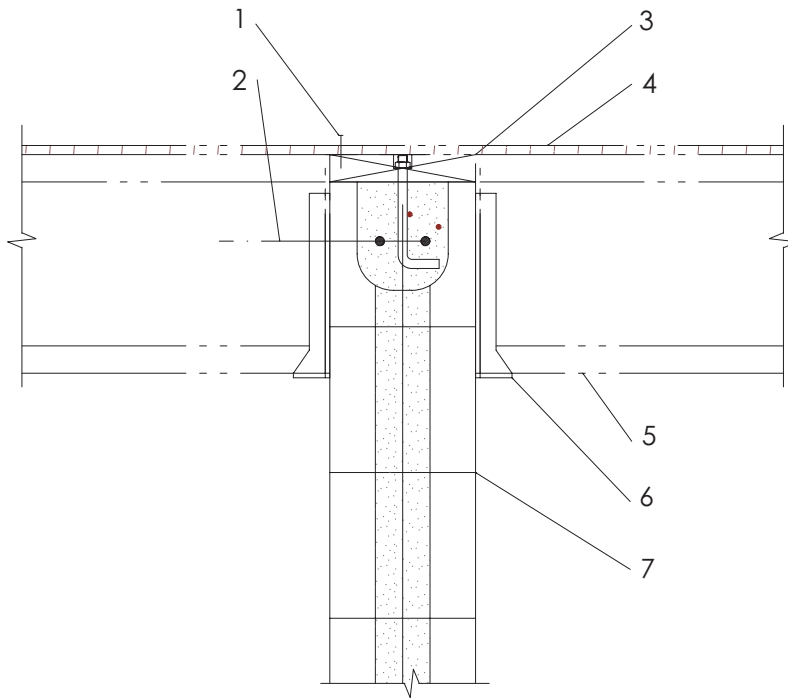
WOOD "I" JOIST AT AAC BLOCK WALL



#### DETAIL KEY NOTES

- 1 AAC block wall with vertical reinforcing in solid grouted cells where shown on plan
- 2 Wood ledger with anchor bolts - by others
- 3 Plywood
- 4 Prefabricated wood "I" joists or wood joist
- 5 Notch AAC "U" block 4" at each - see typical ledger bolt detail
- 6 2 #4 Continuous horizontal reinforcing in solid grouted AAC "U" block
- 7 Simpson wall strap - by others

WOOD "I" JOIST AT AAC BLOCK WALL

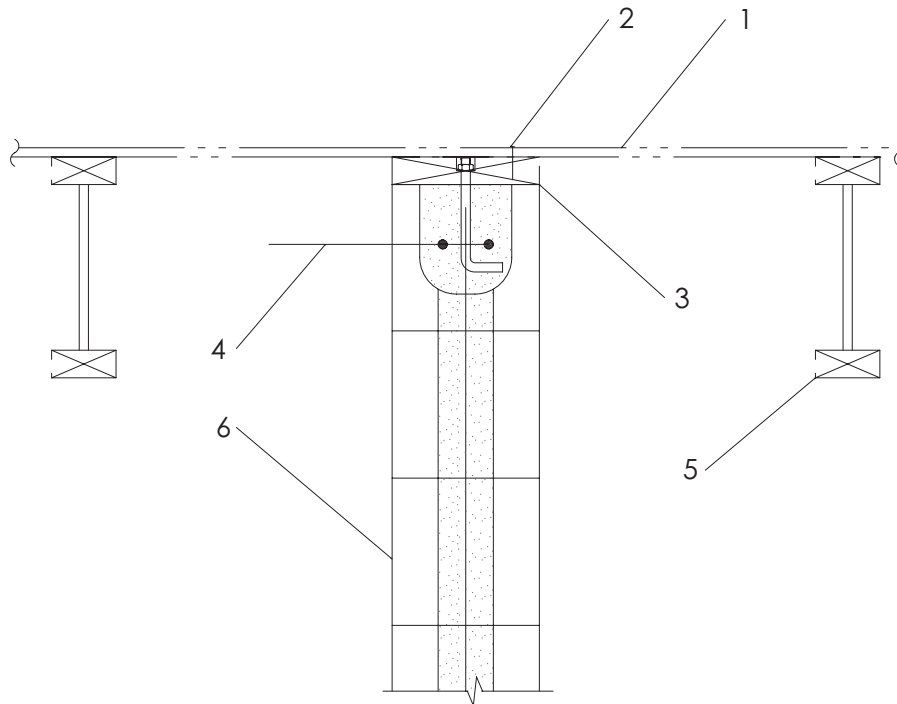


## DETAIL KEY NOTES

- 1 Edge nailing - by others
- 2 2 #4 Continuous horizontal reinforcing in solid grouted AAC "U" block
- 3 Wood plate with anchor bolts - by others
- 4 Plywood sheathing - by others
- 5 Wood "I" joist - by others
- 6 Joist hanger - by others
- 7 AAC Block wall with vertical reinforcing in solid grouted cells where shown on plans

PREFABRICATED WOOD 'I' JOIST AT AAC BLOCK WALL

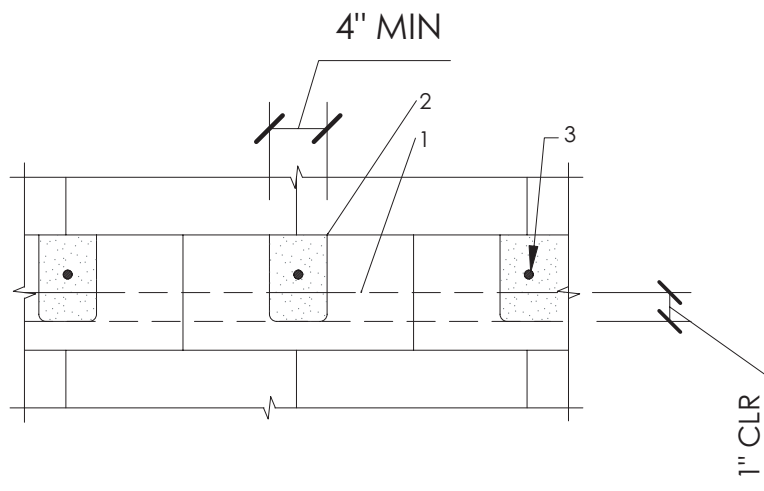




#### DETAIL KEY NOTES

- 1 Roof framing and sheathing - by others
- 2 Edge nailing - by others
- 3 Wood plate - by others
- 4 2 - #4 Continuous horizontal reinforcing in solid grouted AAC "U" block
- 5 Wood "I" joist - by others
- 6 AAC Block wall with vertical wall reinforcing in 4"  $\varnothing$  solid grouted cells where shown on plans

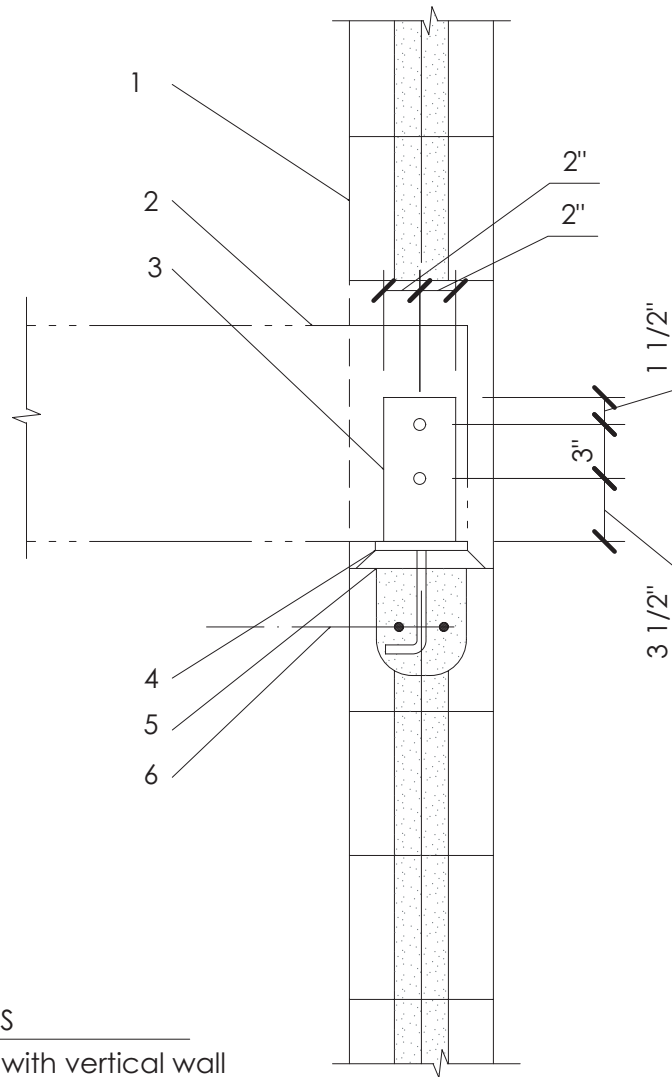
INTERIOR AAC BLOCK WALL @ WOOD "I" JOIST



## DETAIL KEY NOTES

- 1 2 #4 Continuous horizontal reinforcing in solid grouted AAC "U" block
- 2 Notch AAC "U" block 4" around anchor bolt and grout solid around bolt
- 3 Anchor bolts - see plans

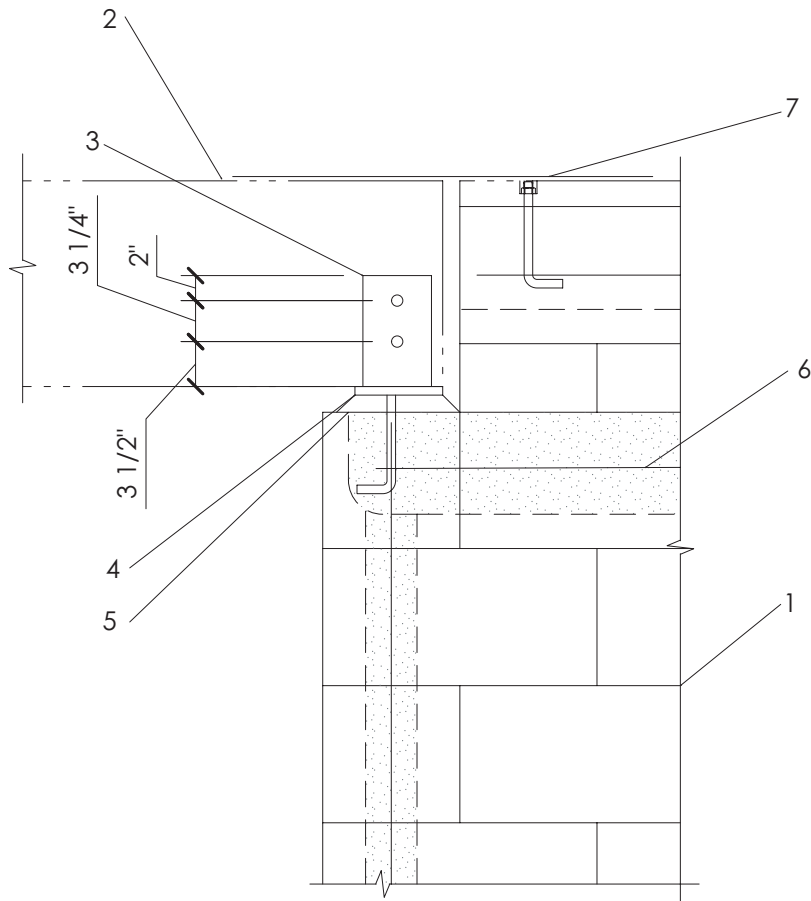
TYPICAL LEDGER BOLT DETAIL AT AAC WALL



#### DETAIL KEY NOTES

- 1 AAC block wall with vertical wall reinforcing in solid grouted cells where shown on plans
- 2 Wood beam
- 3 3/16" Steel plate each side of beam with 2 - 3/4"  $\varnothing$  thru-bolts
- 4 Bearing plate with 2 - 3/4"  $\varnothing$  a.b. - by others
- 5 1" drypack
- 6 2 #4 x 48" long centered under beam in solid grouted

WOOD BEAM @ AAC BLOCK WALL



## DETAIL KEY NOTES

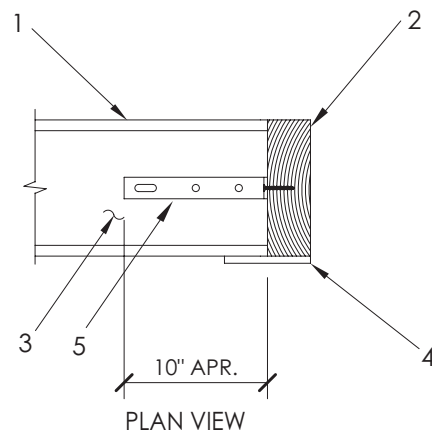
- 1 AAC block wall with vertical wall reinforcing in solid grouted cells where shown on plans
- 2 Wood beam
- 3 3/16" Steel plate each side of beam with 2 - 3/4" Ø thru-bolts
- 4 Bearing plate with 2 - 3/4" Ø a.b.
- 5 1" drypack
- 6 2 #4 x 4'-0" long centered under beam in solid grouted AAC "U" block
- 7 Simpson strap

WOOD BEAM @ AAC BLOCK WALL

# 9

## Architectural Details at Openings

- Wide Door Opening Frame Anchorage
- Steel Door Anchorage to AAC-Block
- Wood Door Anchorage to AAC-Block

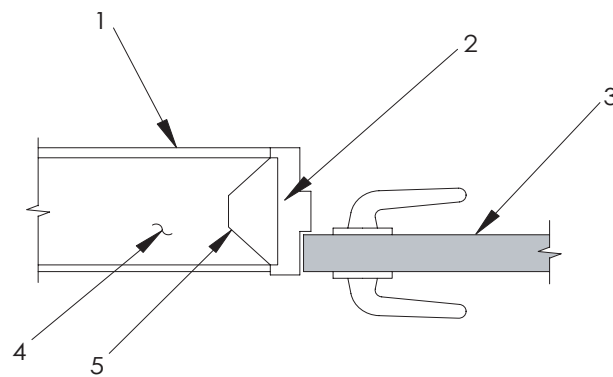


If a door frame opening spans more than 36" either a steel or aac lintel should be installed.

#### DETAIL KEY NOTES

- 1 Plaster
- 2 Wood jamb
- 3 AAC Block wall
- 4 Trim moulding
- 5 18 Gage galvanized strap at 24" o.c.

WIDE DOOR FRAME  
OPENING ANCHORAGE TO AAC BLOCK



PLAN VIEW

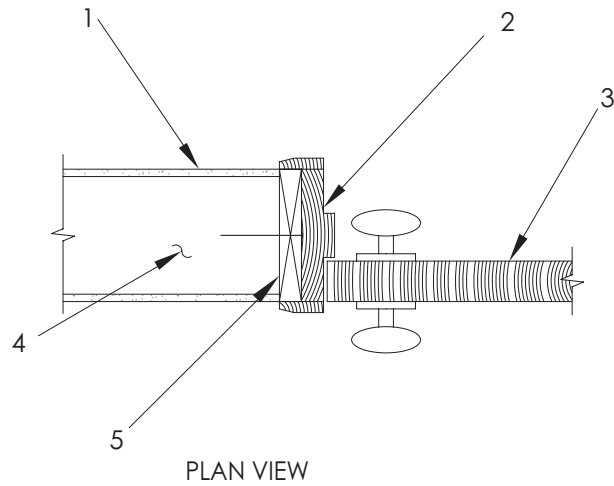
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**DETAIL KEY NOTES**

- 1 Plaster
- 2 Mortar fill
- 3 Steel door
- 4 AAC Block wall
- 5 Frame ties

Use frame wire ties laid in mortar bed to anchor steel door frame to aac block wall as shown in the illustration. Any gaps between frame and aac block should be filled with mortar to eliminate cavities.

**STEEL DOOR FRAME ANCHORAGE TO AAC BLOCK**



#### DETAIL KEY NOTES

- 1 Wall finishes
- 2 Wood door jamb
- 3 Wood door
- 4 AAC Block wall
- 5 Wood blocking screwed into AAC block wall

WOOD DOOR FRAME ANCHORAGE TO AAC BLOCK