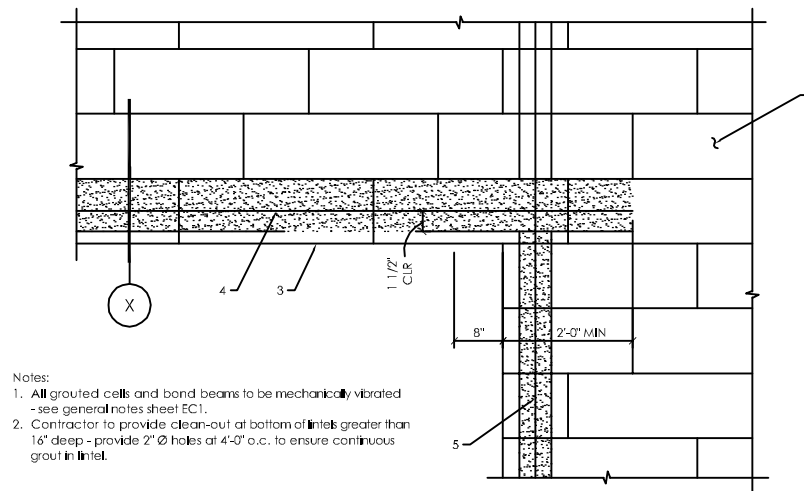


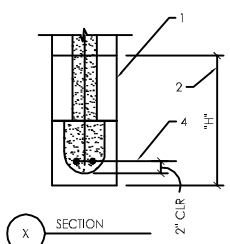
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## AAC Lintel Details

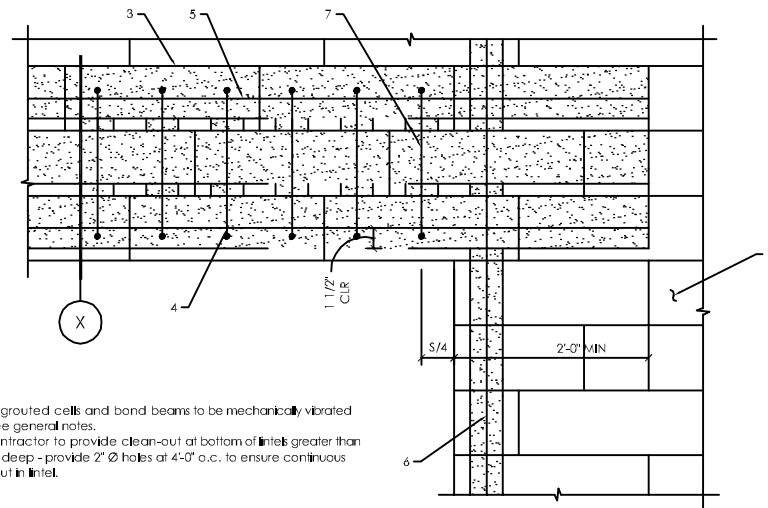
<b>Structural Lintel Details</b>		
<b>Section #</b>	<b>Section Description</b>	<b>Detail No.</b>
18000	AAC Lintel	18001-18007
18100	Steel Lintel Beam at AAC Wall	18101-18103
18300	Power Steel Lintel at AAC Wall	18301



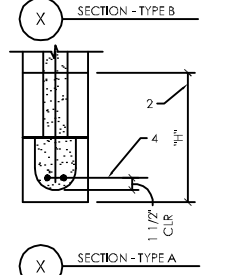
- Notes:
- All grouted cells and bond beams to be mechanically vibrated - see general notes sheet EC1.
  - Contractor to provide clean-out at bottom of lintels greater than 16" deep - provide 2"  $\varnothing$  holes at 4'-0" o.c. to ensure continuous grout in lintel.



- DETAIL KEY NOTES
- AAC block wall with vertical reinforcing in solid grouted cells where shown on plans
  - "H" - AAC Lintel depth - see AAC lintel schedule
  - AAC "U" block with 4"  $\varnothing$  holes at 12" o.c. for continuous grout flow - typ
  - Bottom lintel reinforcing - extend 24" past each end of opening
  - Vertical jamb reinforcing in 4"  $\varnothing$  solid grouted cells - see plans



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



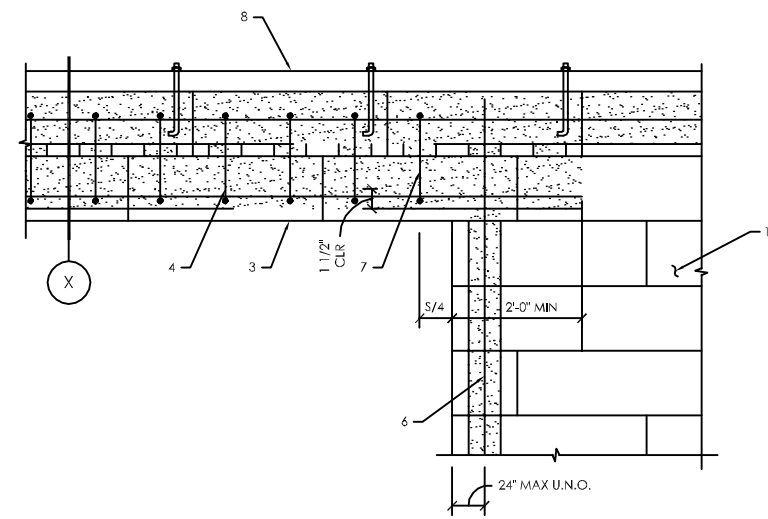
- DETAIL KEY NOTES
- AAC block wall with vertical reinforcing in solid grouted cells where shown on plans
  - "H" - AAC Lintel depth - see AAC lintel schedule
  - AAC "U" block with 4"  $\varnothing$  holes at 12" o.c. for continuous grout flow - typ
  - Bottom lintel reinforcing - extend 24" past each end of opening
  - Top lintel reinforcing were occurs - extend 24" past each end of opening
  - Vertical jamb reinforcing in 4"  $\varnothing$  solid grouted cells - see plans
  - Stirrups as required - see AAC lintel schedule

ELEVATION - AAC LINTEL DETAIL

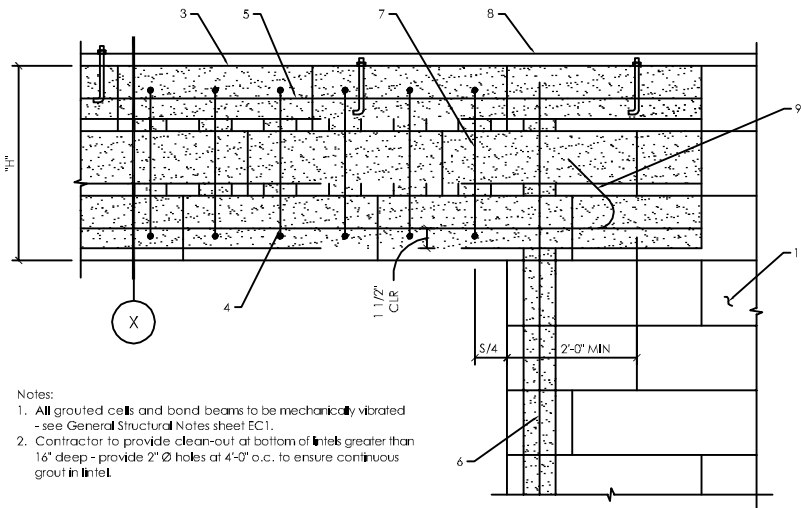
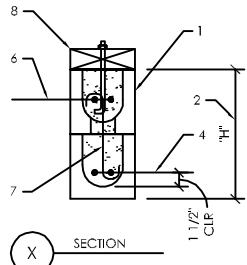
18001

ELEVATION - AAC LINTEL DETAIL

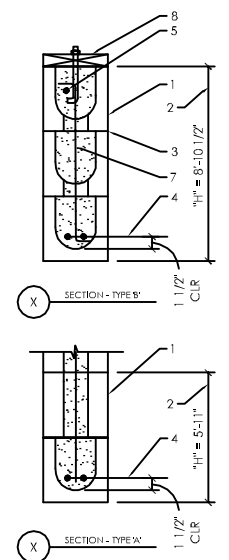
18002



- DETAIL KEY NOTES
- AAC block wall with vertical reinforcing in solid grouted cells where shown on plans
  - "H" - AAC Lintel depth - see AAC lintel schedule
  - AAC "U" block with 4"  $\varnothing$  holes at 12" o.c. for continuous grout flow - typ
  - Bottom lintel reinforcing - extend 24" past each end of opening
  - Top lintel reinforcing - extend 24" past each end of opening
  - Vertical jamb reinforcing in 4"  $\varnothing$  solid grouted cells - see plans
  - Stirrups as required - see AAC lintel schedule
  - Continuous wood plate - see related details



- Notes:
- All grouted cells and bond beams to be mechanically vibrated - see General Structural Notes sheet EC1.
  - Contractor to provide clean-out at bottom of lintels greater than 16" deep - provide 2"  $\varnothing$  holes at 4'-0" o.c. to ensure continuous grout in lintel.



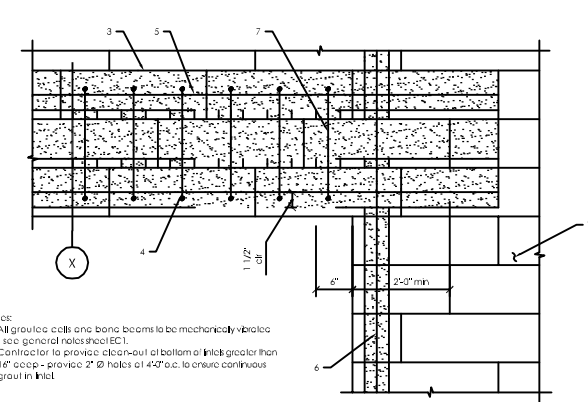
- DETAIL KEY NOTES
- AAC block wall with vertical reinforcing in solid grouted cells where shown on plans
  - "H" - AAC Lintel depth - see AAC lintel schedule
  - AAC "U" block with 4"  $\varnothing$  holes at 12" o.c. for continuous grout flow - typ
  - Bottom lintel reinforcing - extend 24" past each end of opening
  - Top lintel reinforcing - extend 24" past each end of opening
  - Vertical jamb reinforcing in 4"  $\varnothing$  solid grouted cells - see plans
  - Stirrups as required - see AAC lintel schedule
  - Continuous wood plate typical - see specific details for attachment
  - 60° Hooked bottom rebar at 201A - 2 rebar to be bent horizontally to splice bond beam rebar

ELEVATION - AAC LINTEL DETAIL

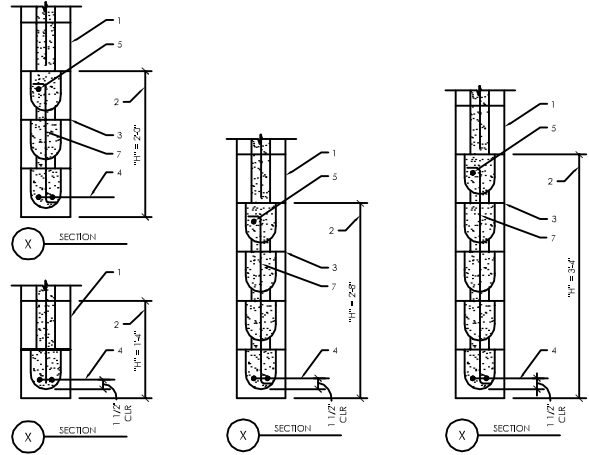
18003

ELEVATION - AAC LINTEL DETAIL

18004



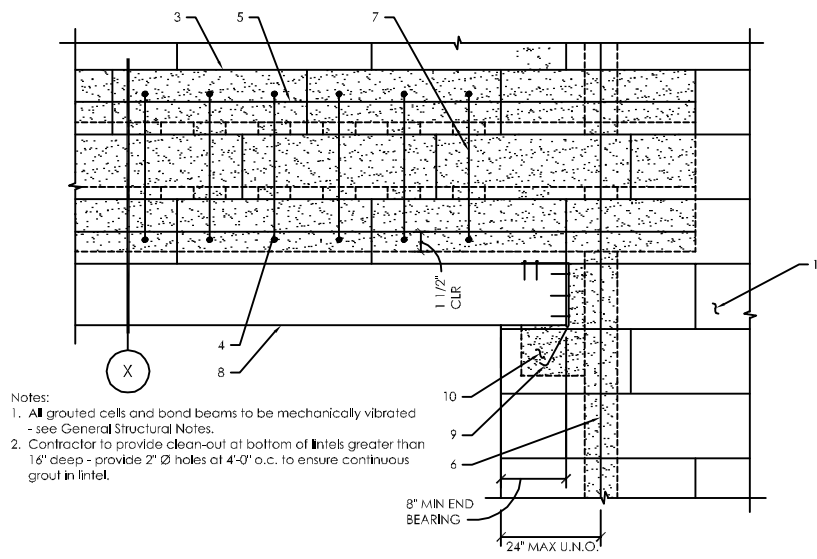
- Notes:
- All grouted cells and bond beams to be mechanically vibrated - see general notes sheet EC1.
  - Contractor to provide clean-out at bottom of lintels greater than 16" deep - provide 2"  $\varnothing$  holes at 4'-0" o.c. to ensure continuous grout in lintel.



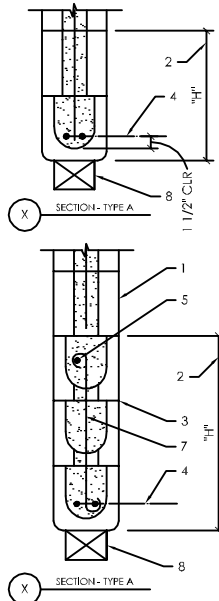
- DETAIL KEY NOTES
- AAC block wall with vertical reinforcing in solid grouted cells where shown on plans
  - "H" - AAC Lintel depth - see AAC lintel schedule
  - AAC "U" block with 4"  $\varnothing$  holes at 12" o.c. for continuous grout flow - typ
  - Bottom lintel reinforcing - extend 24" past each end of opening
  - Top lintel reinforcing - extend 24" past each end of opening
  - Vertical jamb reinforcing in 4"  $\varnothing$  solid grouted cells - see plans
  - Stirrups as required - see AAC lintel schedule

ELEVATION - AAC LINTEL DETAIL

18005



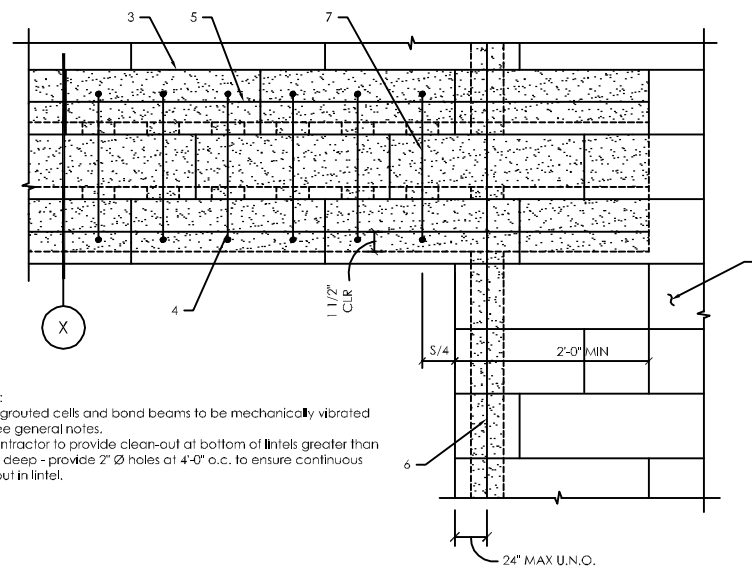
- Notes:
1. All grouted cells and bond beams to be mechanically vibrated - see General Structural Notes.
  2. Contractor to provide clean-out at bottom of lintels greater than 16" deep - provide 2"  $\varnothing$  holes at 4'-0" o.c. to ensure continuous grout in lintel.



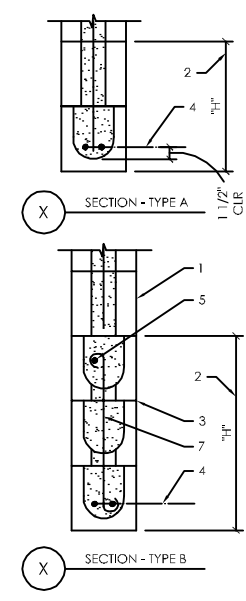
- DETAIL KEY NOTES
- 1 AAC block wall with vertical reinforcing in solid grouted cells where shown on plans
  - 2 "H" - AAC lintel depth - see AAC lintel schedule
  - 3 AAC "U" block with 4"  $\varnothing$  holes at 12" o.c. for continuous grout flow - typ
  - 4 Bottom lintel reinforcing - extend 24" past each end of opening
  - 5 Top lintel reinforcing were occurs - extend 24" past each end of opening
  - 6 Vertical jamb reinforcing in 4"  $\varnothing$  solid grouted cells - where shown on plans
  - 7 Slirups where shown on plans - see AAC lintel schedule
  - 8 Exposed architectural wood header - provide a moisture barrier membrane between wood header and AAC block
  - 9 Simpson HETA2 strap nailed to back side of wood header
  - 10 Solid grout 6" around strap

ELEVATION - AAC LINTEL DETAIL

18006



- 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"  $\varnothing$  holes at 4'-0" o.c. to ensure continuous grout in lintel.



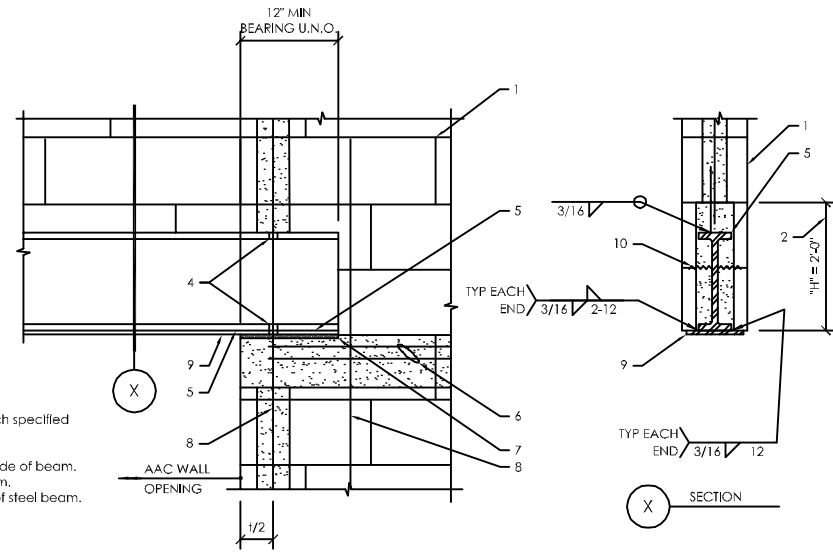
- DETAIL KEY NOTES
- 1 AAC block wall with vertical reinforcing in solid grouted cells where shown on plans
  - 2 "H" - AAC lintel depth - see AAC lintel schedule
  - 3 AAC "U" block with 4"  $\varnothing$  holes at 12" o.c. for continuous grout flow - typ
  - 4 Bottom lintel reinforcing - extend 24" past each end of opening
  - 5 Top lintel reinforcing were occurs - extend 24" past each end of opening
  - 6 Vertical jamb reinforcing in 4"  $\varnothing$  solid grouted cells - where shown on plans
  - 7 Slirups where shown on plans - see AAC lintel schedule

ELEVATION - AAC LINTEL DETAIL

18007

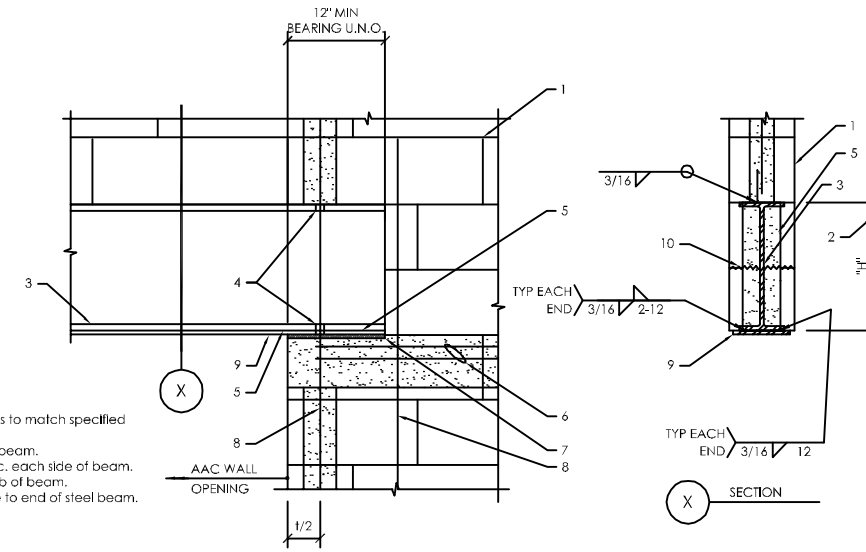
18006-18007

E-CRETE



- Notes:
1. Weld dowels to lintels to match specified vertical reinforcing.
  2. Grout solid inside of beam.
  3. Veneer ties at 16" o.c. each side of beam. Tack weld ties to web of beam.
  4. Extend bottom plate to end of steel beam.

- 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 Wide flange steel lintel - see AAC lintel schedule
  - 4 1"  $\varnothing$  holes in flanges of beam and plate for jamb reinforcing
  - 5 Extend plate to end of lintel
  - 6 2 #4 x 2'-8" in solid grouted AAC "U" block
  - 7 Install lintel on fresh mortar bed for full bearing
  - 8 Jamb reinforcing where indicated
  - 9 3/16" continuous steel plate
  - 10 16 gage steel veneer ties

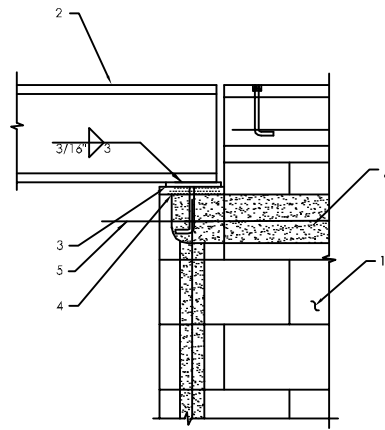


- Notes:
1. Weld dowels to lintels to match specified vertical reinforcing.
  2. Grout solid inside of beam.
  3. Veneer ties at 16" o.c. each side of beam. Tack weld ties to web of beam.
  4. Extend bottom plate to end of steel beam.

- 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 Wide flange steel lintel - see AAC lintel schedule
  - 4 1"  $\varnothing$  holes in flanges of beam and plate for jamb reinforcing
  - 5 Extend plate to end of lintel
  - 6 2 #4 x 2'-8" in solid grouted AAC "U" block
  - 7 Install lintel on fresh mortar bed for full bearing
  - 8 Jamb reinforcing where shown on plans
  - 9 3/16" continuous steel plate
  - 10 Veneer ties

ELEVATION - AAC LINTEL WITH WIDE FLANGE STEEL LINTEL BEARING

ELEVATION - AAC LINTEL WITH WIDE FLANGE STEEL LINTEL BEARING



- DETAIL KEY NOTES
- 1 AAC block wall with vertical wall reinforcing in solid grouted cells where shown on plans
  - 2 Steel beam
  - 3 Bearing plate with 2 - 3/4"  $\varnothing$  a.b. - by others
  - 4 1" drypack
  - 5 2 #4 x 4'-0" long centered under beam in solid grouted AAC "U" block

STEEL BEAM AT AAC BLOCK WALL

DETAIL KEY NOTES

- PRODUCT NAME (PATENT NO. 5465598, 5800151 & BR 9979)  
 PREFORMED POWER STEEL LINTEL SHALL BE GALVANIZED COIL STEEL AS MANUFACTURED BY POWERS STEEL AND WIRE PRODUCTS, INC. STEEL GRADE SHALL BE ASTM A653 GRADE 55. #4 BOTTOM FLANGE DEFORMATION AT CONTRACTORS OPTION MUST BE PARALLEL TO THE LINTEL OR TRANSVERSE TO THE BOTTOM FLANGE.  
 NOTE: DEFORMATIONS DO NOT AFFECT STRUCTURAL CAPACITY.
- SHORE LINTELS AS REQUIRED TO COMPENSATE FOR DEAD LOAD DEFLECTION ON NON-CURED MASONRY GROUT.
- LINTEL TO BE USED WITH E-CRETE AAC BLOCK LINTEL HAVING MINIMUM DENSITY AS SHOWN.
- STEEL SURFACES IN CONTACT WITH GROUT AND/OR MORTAR SHALL BE UNPAINTED AND FREE OF MATERIAL THAT MIGHT INHIBIT BOND.
- BEARING BRICH END SHALL BE 4".
- E-CRETE AAC BLOCK LINTEL SHALL CONFORM TO ASTM C1366 AND ICC ESR-129. MINIMUM DENSITY = 31 PCF.
- GROUT = 2000 psi 3/4" W/P RANGE 4" TO 9" ROD OR VIBRATE GROUT AND ALLOW TO CURE UNDISTURBED. GROUT (NO AIR FOCKER) GROUT SHALL COMPLY WITH ASTM C426-03 AND BE COARSE GROUT.
- MORTAR: E-CRETE THIN SET JOINT TYPE FC = 1450 psi PER ICC ESR-1371.
- WHERE TOP OF WALL IS TOP OF LINTEL, REINFORCING IS REQUIRED BY CODES TO PROVIDE A CONTINUOUSITY AROUND A STRUCTURE AND TO PROVIDE FOR UPLIFT RESISTANCE AT LINTEL. WHERE TOP OF LINTEL IS NOT TOP OF WALL, TOP LINTEL REINFORCING IS REQUIRED. WHERE STRIPS ARE REQUIRED, TOP REINFORCING IS REQUIRED AT SPANS GREATER THAN 6'-0".
- ATTACHMENTS TO TOP OF WALL PER ARCHITECTURAL AND/OR ENGINEERING DRAWINGS.
- STEEL STRIPS SHALL CONFORM TO ASTM A52 Fy=60 KSI. MINIMUM STRIPS SHALL BE 2 1/2" DIAMETER SMOOTH END. AN ALTERNATE SIZE STRIP SHALL BE 2 1/2" x 3/4" x LINTEL HEIGHT MINUS 2" PER SKETCH.

- E-CRETE AAC WALL MAY OCCUR ABOVE COMPOSITE LINTEL HEIGHT IN THE CASE THAT THE E-CRETE AAC WALL IS TWICE THE HEIGHT OF THE LINTEL HEIGHT THE DEAD LOAD HEIGHT OF THE LINTEL MAY BE EXCLUDED FROM THE LOAD CALCULATIONS DUE TO THE COMPOSITE NATURE OF THE LINTEL ASSEMBLY.
- #4 BOTTOM LINTEL REINFORCING TO BE LOCATED 3" FROM THE BOTTOM OF THE LINTEL AND TO EXTEND 24" PAST FACE OF JAMB.
- MANUFACTURERS:  
 POWERS STEEL PRODUCTS LINTELS  
 41 US E. BAYWOOD PHOENIX, AZ 85040  
 PH# 602-427-1160 FAX# 602-427-5409  
 E-CRETE PRODUCTS  
 2121 E. BROADWAY RD. #116 TEMPE, AZ 85282  
 PH# 480-576-2017 FAX# 480-576-2752
- TECHNICAL DATA AND ENGINEERING POWERS LINTELS HAVE BEEN OBTAINED IN ACCORDANCE WITH THE FOLLOWING:  
 \* INTERNATIONAL CODE 1997  
 \* INTERNATIONAL BUILDING CODE 2000  
 \* AS LIGHT GAUGE COLD FORMED STEEL DESIGN 1996

TECHNICAL RESISTANCE IS AVAILABLE FROM THE MANUFACTURER ON SPECIAL DESIGN CONDITIONS OR LINTEL DEPTHS DIFFERENT THAN THOSE SHOWN IN THE LOAD TABLES.

STRUCTURAL ENGINEER FOR THESE LINTELS IS:  
 I. E. CONRUANTS, INC.  
 5000 E. THORNGATE, SUITE 104  
 SCOTTSDALE, AZ 85252  
 PHONE NO. (480) 946-0010  
 FAX (480) 946-1909

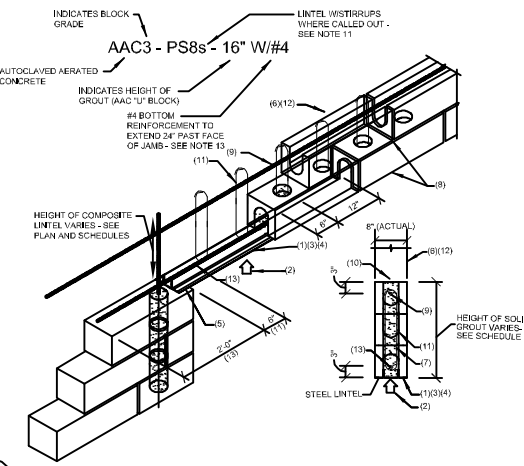
IF AN INSPECTOR, CONTRACTOR, SUBCONTRACTOR, OR PLANS EXAMINER HAS ANY TECHNICAL QUESTIONS PLEASE CALL.

INSTALLATION:  
 POWERS LINTELS ARE TO BE INSTALLED IN ACCORDANCE WITH STANDARD CONSTRUCTION PRACTICES, SET TO PROPER LINE AND LEVEL, PLUMB AND TRUE, AND IN CORRECT RELATION TO OTHER WORK.



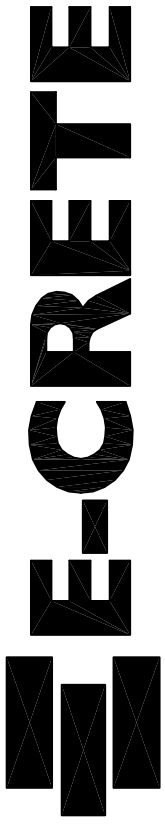
STRIP PLACEMENTS 1/2" DEEP AND DEEPER LINTELS STRIPS AT 12" O.C. WHERE CALLED OUT STRIPS SHALL BE 1-1/2" CLEAR FROM TOP OF GROUT.  
 PLACE REINFORCING 6" FROM FACE OF JAMB AS SHOWN PLUS OR MINUS 1".

PSR STEEL LINTELS  
 NOTE: NO SCALE  
 1/8" GAUGE & 300 IN CHES THICK.



POWER STEEL LINTEL/E-CRETE AAC BLOCK LINTEL

18301



18301-