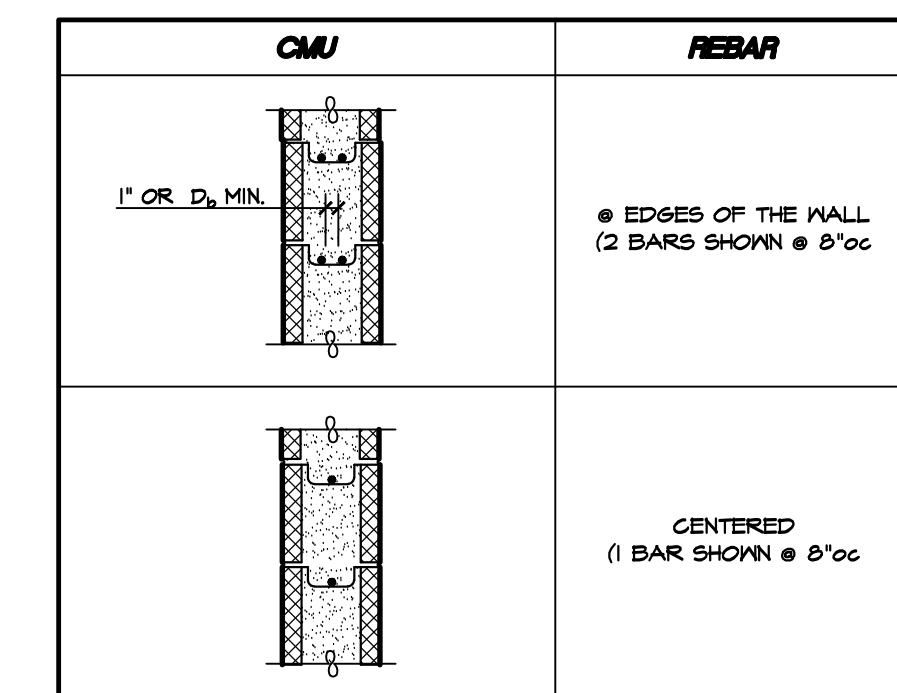
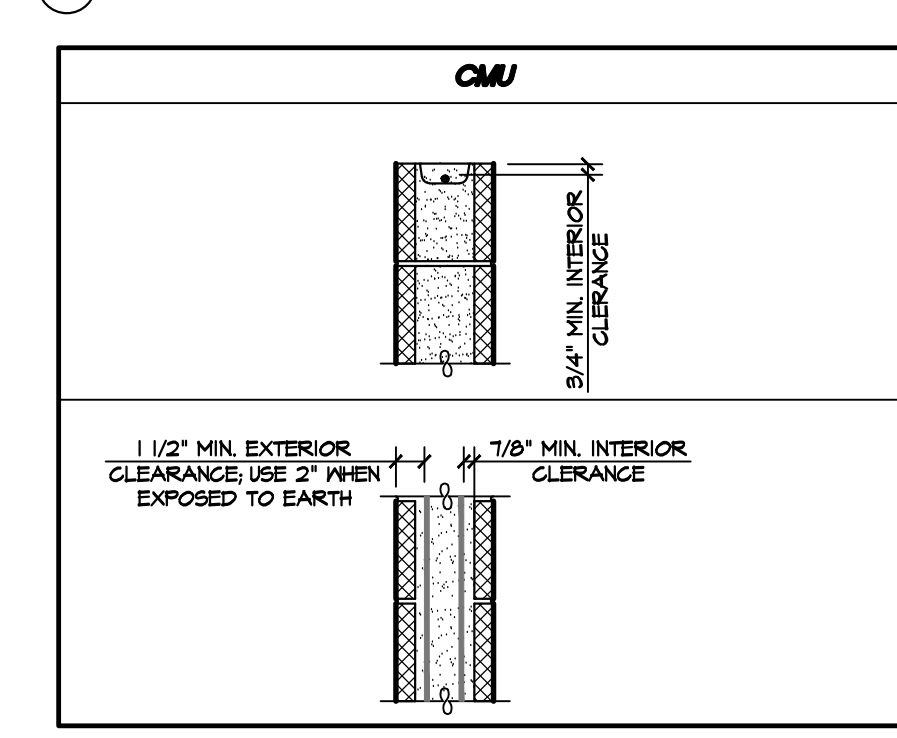


**A PLACEMENT OF VERTICAL BARS**

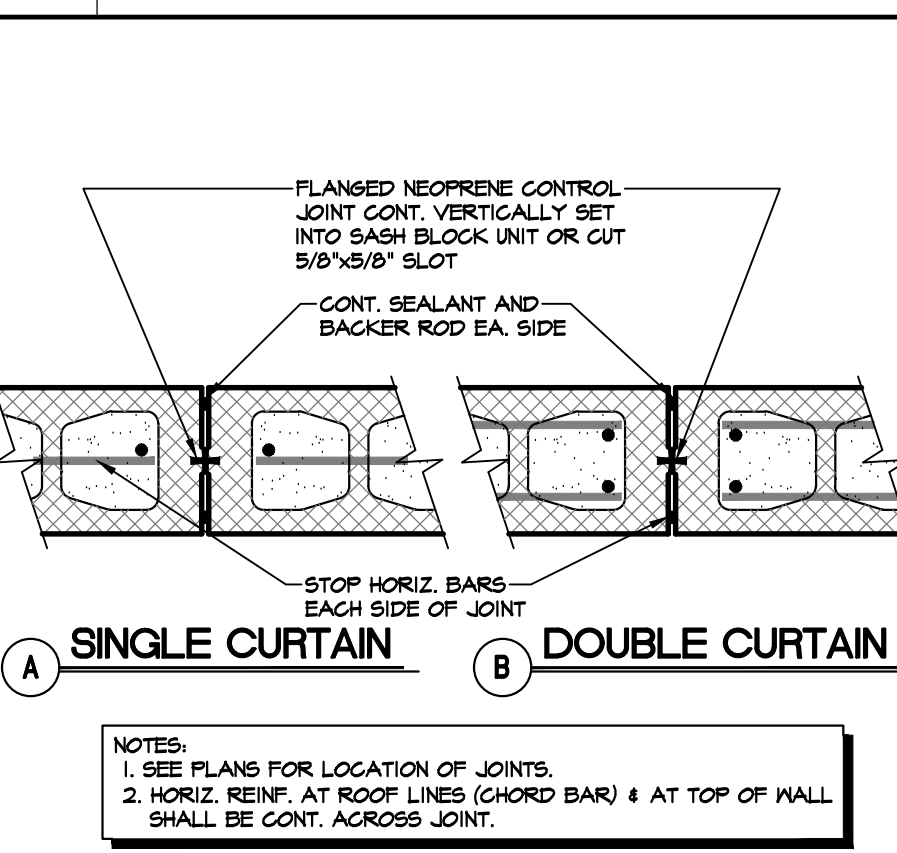


**B PLACEMENT OF HORIZONTAL BARS**

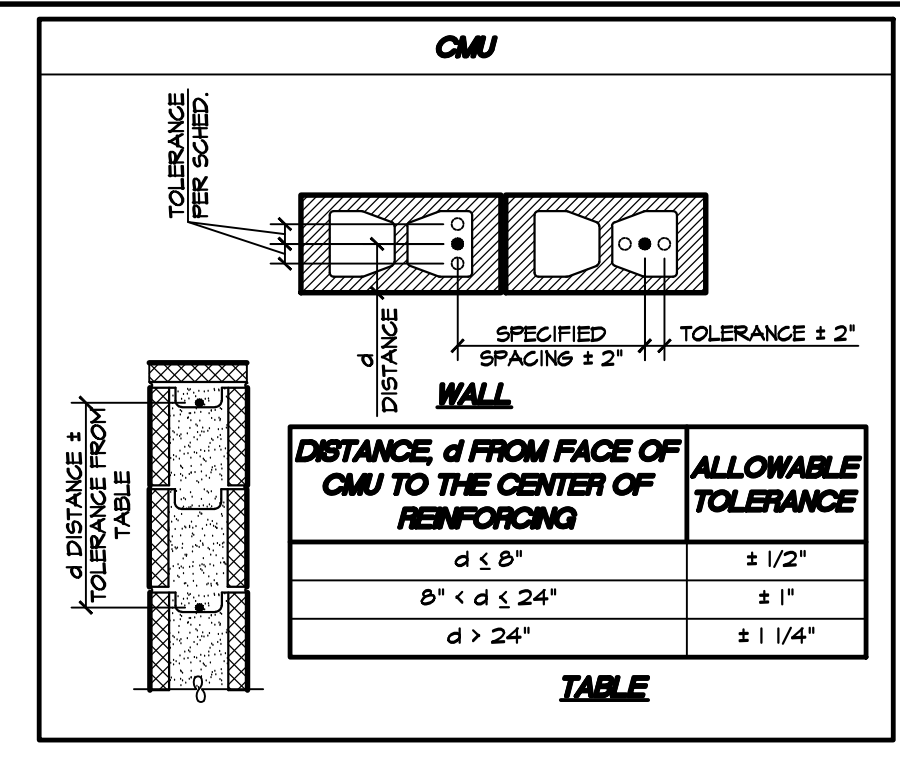


**C COVER OVER REINFORCING**

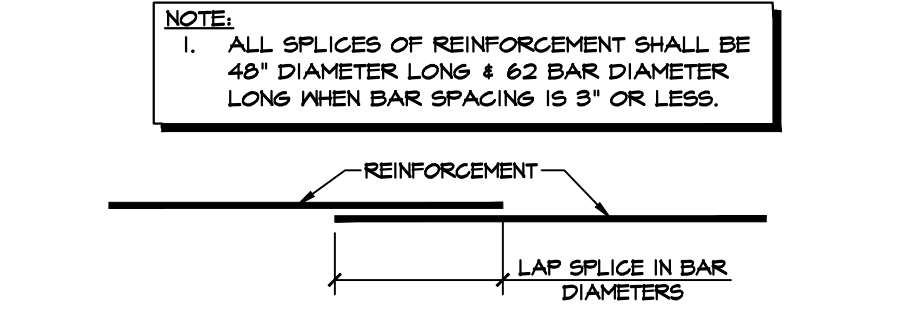
**4 CMU REINFORCEMENT**



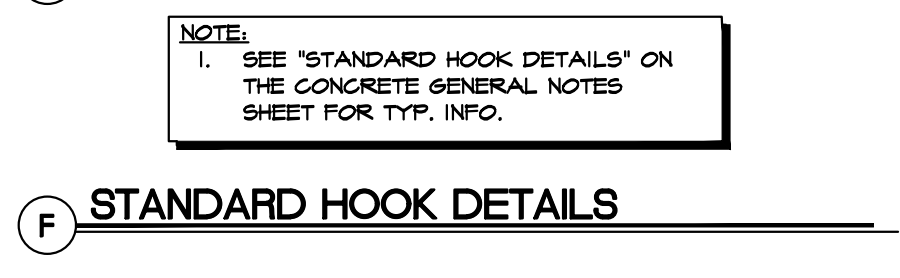
**6 CMU WALL CONTROL JOINT**



**D PLACEMENT TOLERANCES OF STEEL**



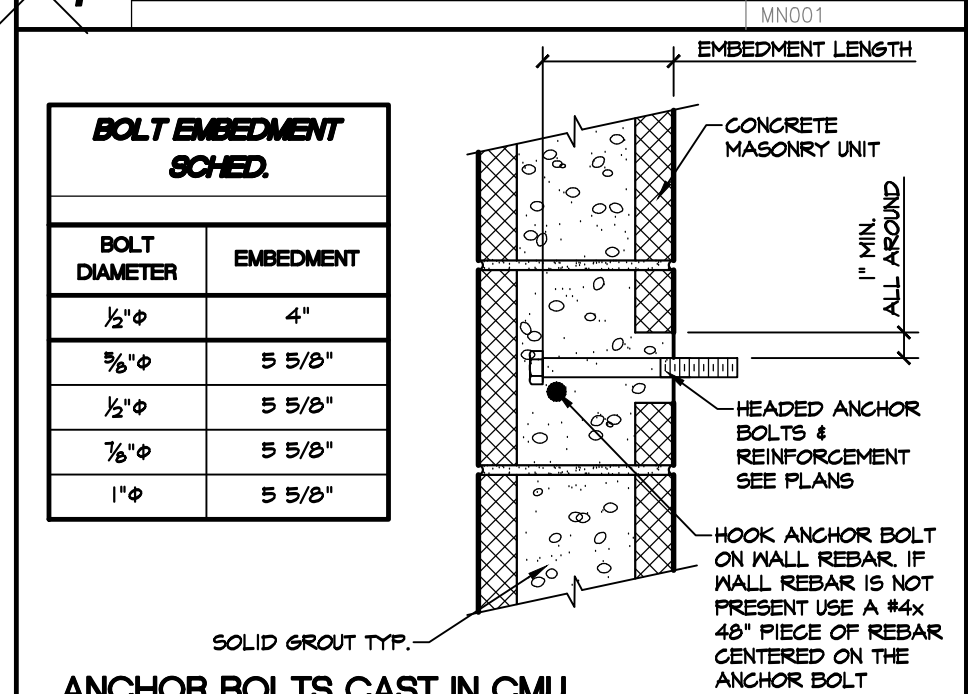
**E REINFORCEMENT SPLICES**



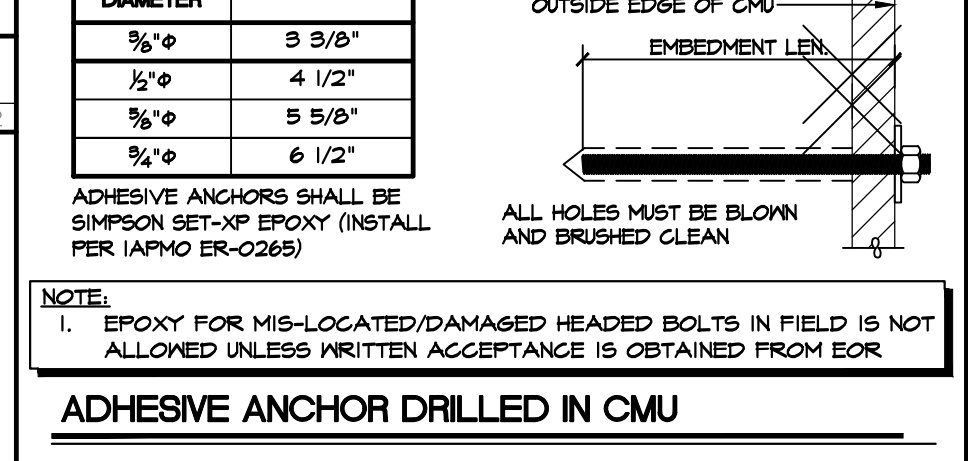
**F STANDARD HOOK DETAILS**

- CONCRETE MASONRY UNITS SHALL BE TYPE "N" AS SET FORTH IN A.S.T.M. SPEC. NO. C90. F<sub>m</sub>=1500 P.S.I. MINIMUM TYPE 1, MOISTURE CONTROLLED. SEE PLAN FOR ADDITIONAL REQUIREMENTS (IF APPLICABLE).
- MORTAR SHALL BE TYPE "S" WITH A MINIMUM COMPRESSIVE STRENGTH OF 1800 P.S.I. AT 28 DAYS. THE MORTAR STRENGTH MUST ALSO BE 500 PSI GREATER THAN THE F<sub>m</sub> OF THE CMU IT IS PART OF, TYP.
- GROUT SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 2000 P.S.I. AT 28 DAYS. THE GROUT STRENGTH MUST ALSO BE 500 PSI GREATER THAN THE F<sub>m</sub> OF THE CMU IT IS PART OF, TYP.
- HORIZONTAL REINFORCING SHALL BE LAID IN BOND BEAM UNITS AND SECURELY WIRED TO THE VERTICAL REINFORCING.
- VERTICAL REINFORCING SHALL BE CENTERED IN WALL U.N.O. AND PLACED IN OPEN END UNITS BEFORE BLOCK WORK BEGINS AND SHALL BE HELD IN POSITION AT TOP AND BOTTOM AND AT INTERVALS NOT EXCEEDING 192 BAR DIAMETERS.
- ALL CELLS SHALL BE GROUTED SOLID.
- LAP HORIZONTAL AND VERTICAL REINFORCING BAR 48 DIAMETERS AT SPLICES.
- DOWELS IN ALL FOUNDATIONS SHALL HAVE THE SAME LOCATION, SIZE, AND SPACING AS THE VERTICAL MASONRY REINFORCING.
- GROUT SHALL BE VIBRATED IN PLACE WITH A MECHANICAL VIBRATOR DESIGNED FOR MASONRY UNITS SHALL BE LAID IN RUNNING BOND, U.N.O.
- GROUTING OF BEAMS OVER OPENINGS SHALL BE DONE IN CONTINUOUS OPERATION WITH A MINIMUM 12" SEAT AT EACH END UNLESS PLACED IN TOTAL WITH WALL GROUTING.
- USE 2-#5 HORIZONTAL BARS AT TOP AND BOTTOM OF ALL LINTEL BEAMS EXCEPT AS SHOWN OTHERWISE.
- PROVIDE 2-#5 VERTICAL BARS AT ALL CORNERS AND WALL ENDS.
- ALL WALL OPENINGS SHALL BE SHORED FOR A MINIMUM OF 28 DAYS UNLESS NOTED OTHERWISE.
- ALL REINFORCING STEEL SHALL BE GRADE 60.
- TYPICAL WALL REINFORCING SHALL BE #4 AT 24" O.C. EACH WAY, EXCEPT AS SHOWN OTHERWISE.
- GROUT PLACEMENT SHALL CONFORM TO THE REQUIREMENTS OF THE ACI 530.1.
- MATERIAL:
  - MORTAR SHALL CONFORM TO ASTM C 270, AND GROUT SHALL CONFORM TO ASTM C 476.
  - WATER USED IN MIXING MORTAR OR GROUT SHALL BE CLEAN AND FREE FROM INJURIOUS AMOUNTS OF OILS, ACIDS, ALKALIS, SALT, ORGANIC MATERIALS OR OTHER SUBSTANCES THAT MAY BE DELETERIOUS TO MASONRY OR REINFORCEMENT. NONPOTABLE WATER SHALL NOT BE USED.
- ADDITIVES AND ADMIXTURES TO MORTAR OR GROUT SHALL NOT BE USED UNLESS APPROVED BY THE ENGINEER OR RECORD.
- PRIOR TO GROUTING, THE GROUT SPACE SHALL BE CLEAN SO THAT ALL SPACES TO BE FILLED WITH GROUT DO NOT CONTAIN MORTAR PROJECTIONS GREATER THAN 1/2" MORTAR DROPPINGS OR OTHER FOREIGN MATERIAL. GROUT SHALL BE PLACED SO THAT ALL CELLS SHALL BE FILLED SOLID.
- A PERFORATED DRAIN PIPE SHOULD BE PLACED AT THE BASE OF ALL RETAINING WALLS SO THAT HYDROSTATIC PRESSURE CANNOT FORM BEHIND THE WALL.
- ALL MASONRY PLACED DIRECTLY AGAINST SOIL (EARTH, SAND, GRAVEL, DIRT, ETC.) OR WHERE STANDING WATER WILL BE PRESENT FOR MORE THAN ONE DAY AT A TIME, SHALL BE WATERPROOFED ON EX. FACE WITH THE ABOVE EXPOSURE INCLUDING ALL JOINTS W/ ADJOINING STRUCTURES (FOOTINGS, WALLS, ETC.). THE CONTRACTOR IS RESPONSIBLE FOR USING AN INDUSTRY APPROVED METHOD FOR THE ABOVE WATERPROOFING.

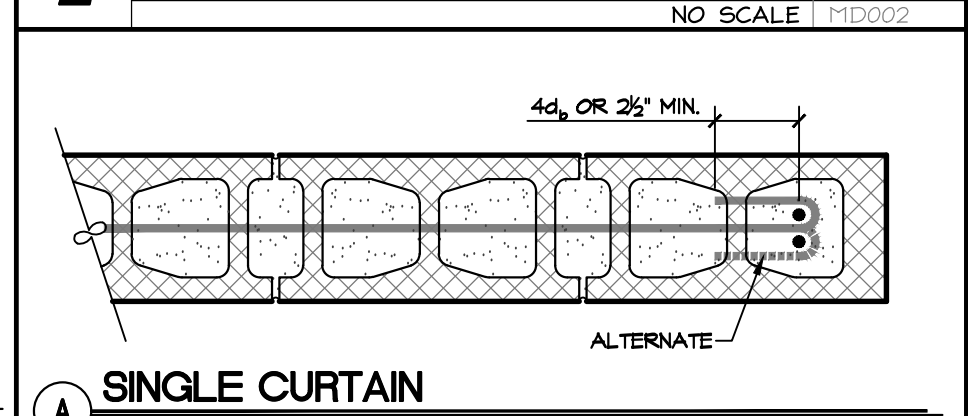
**1 GENERAL MASONRY NOTES**



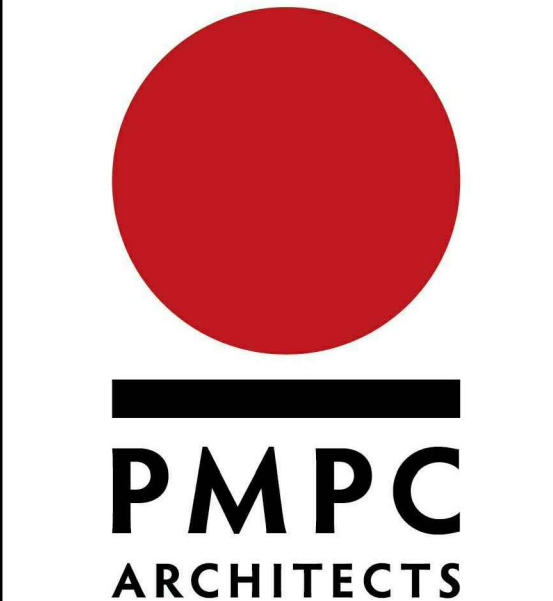
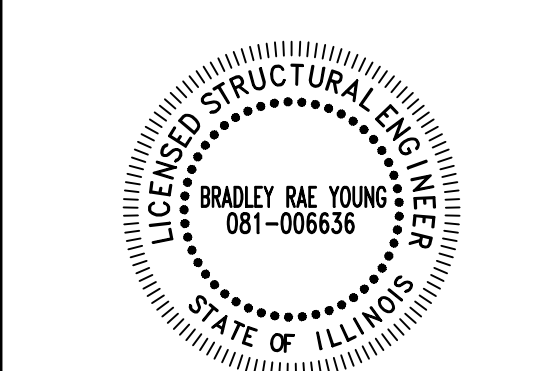
**ADHESIVE ANCHOR DRILLED IN CMU**



**2 CMU WALL DOWEL**



**3 TERMINATION OF REINFORCING**



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**REVISIONS**

NO.	DATE	DESCRIPTION
08-10-2017	DD	50% - CLIENT
10-20-2017	COLLABORATE	- SENT
12-18-2017	DD	100% - CLIENT APPROVAL

DRAWN BY: Author  
 CHECKED BY: Checker  
 ISSUED:

1005 W BELVIDERE RD,  
 GRAYSLAKE, IL 60030

PERMIT #:

STANDARD NOTES

**S1.3**