DESIGNER NOTE:
TMS 602 TOLERANCES ARE GENERALLY FOR STRUCTURAL MASONRY AND NOT FOR MASONRY VENEER. COORDINATION IS REQUIRED BETWEEN THE SPECIFICAITON AND GENERAL NOTES.

DESIGNER NOTE:
HOT/COLD WEATHER PROCEDURES ARE OFTEN REQUIRED AS A SUBMITTAL ON PROJECTS.

DESIGNER NOTE:
CONTACT BDC OR LOCAL MASONRY ASSOCIATION FOR REPRESENTATIVE COMPRESSIVE STRENGTHS FOR PROJECT LOCATION.

DESIGNER NOTE:
ASTM C270 ALLOWS 3 TYPES OF CEMENT TO BE USED IN MORTAR. TMS 402/602 HAS RESTRICTIONS ON MASONRY CEMENT BASED ON SEISMIC DESIGN CATEGORY. CONTACT BDC FOR MORE INFORMATION.

DESIGNER NOTE:
GROUT COMPRESSIVE STRENGTH IS COMMONLY SPECIFIED TO MEET OR EXCEED F'M.

DESIGNER NOTE:
GROUT CERTIFICATION TRAINING IS OFFERED BY VARIOUS ORGANIZATIONS INCLUDING THE IMI AND MIM.

DESIGNER NOTE:
FEDERAL OSHA REQUIRES WALLS WITH HEIGHTS EXCEEDING 8'-0" TO BE BRACED UNTIL FINAL LATERAL SUPPORT IS ACHIEVED.

DESIGNER NOTE:
TMS REQUIRES THE DESIGNER TO SHOW THE TYPE AND LOCATION OF MOVEMENT JOINTS IN THE PROJECT DRAWINGS.

DESIGNER NOTE:
CMU-TEC-009-25 HAS ADDITIONAL INFORMATION ON HORIZONTAL JOINT REINFORCEMENT REQUIREMENTS.

DESIGNER NOTE:
MINIMUM QUALITY ASSURANCE LEVEL IS DETERMINED BASED ON TMS 402 SECTION 3.1 AND DEPENDENT ON RISK CATEGORY.

DESIGNER NOTE:
RECOMMENDATION BASED ON MASONRY STRENGTH GAIN RESEARCH CONDUCTED BY CMHA.

DESIGNER NOTE:
THE 2016 AND EARLIER VERSIONS OF TMS 602 REQUIRED A 6 IN. LAP FOR JOINT REINFORCEMENT AND THIS WAS REVISED TO 8 IN. IN THE 2022 VERSION.

DESIGNER NOTE:
VERIFY THAT REINFORCEMENT COVER IS ADEQUATE FOR FIRE-RATED WALLS IN ACCORDANCE WITH ACI/TMS 216.1

MASONRY

1. MASONRY CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE MORE STRINGENT PROVISIONS OF CHAPTER 21 OF THE **2015 INTERNATIONAL BUILDING CODE** AND THE REQUIREMENTS OF THE **"SPECIFICATION FOR MASONRY STRUCTURES (TMS 602-13)"** PUBLISHED BY THE MASONRY SOCIETY, LONGMONT, COLORADO, EXCEPT AS MODIFIED BY THE REQUIREMENTS OF THESE CONTRACT DOCUMENTS.
2. CONTRACTOR SHALL PROVIDE NECESSARY LABOR, MATERIALS AND EQUIPMENT TO LAY MASONRY AS SHOWN OR SPECIFIED IN THESE CONSTRUCTION DOCUMENTS.
3. ALL WORK SHALL BE LAID TRUE TO A LINE, PLUMB AND LEVEL IN KEEPING WITH THE TOLERANCES GIVEN IN **"SPECIFICATIONS FOR MASONRY STRUCTURES (TMS 602-13)**.
4. EMPLOY HOT OR COLD WEATHER CONSTRUCTION PRACTICES AS DEFINED IN TMS 602 WHEN AMBIENT AIR TEMPERATURE EXCEEDS 100°F OR IS BELOW 40°F.
5. CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90.
   A. THE MASONRY ASSEMBLY SHALL HAVE A **MINIMUM COMPRESSIVE STRENGTH (F'M) OF [2000 PSI] [2500 PSI] [3000 PSI]**
   B. MASONRY ASSEMBLY COMPRESSIVE STRENGTH SHALL BE DEEMED TO COMPLY THROUGH THE USE OF MASONRY UNITS WITH A **NET AREA COMPRESSIVE STRENGTH OF [2000 PSI] [2500 PSI] [3000 PSI]** OR THROUGH MASONRY PRISM TESTING WITH PRIOR APPROVAL.
6. MORTAR SHALL BE OF MATERIALS AND PROPORTIONED IN COMPLIANCE WITH THE PROPORTION SPECIFICATIONS OF ASTM C270 AND SHALL BE OF THE FOLLOWING TYPE BASED ON APPLICATION:
   A. TYPE S FOR MASONRY BELOW GRADE OR IN CONTACT WITH EARTH
   B. TYPE S FOR UNREINFORCED MASONRY ABOVE GRADE
   C. TYPE S FOR REINFORCED MASONRY ABOVE GRADE
   D. TYPE N FOR VENEER MASONRY
7. TOOL MORTAR JOINTS TO A CONCAVE PROFILE, USING A JOINTER LARGER THAN JOINT THICKNESS, ON EXPOSED INTERIOR FACE OF WALL AND EXTERIOR EXPOSED FACE WHEN MORTAR IS THUMBPRINT HARD. STRIKE MORTAR JOINTS FLUSH ON EXTERIOR (CAVITY) FACE OF BACKUP WYTHE.
8. SAND FOR MORTAR SHALL CONFORM TO ASTM C144 AND SHALL BE MEASURED IN LOOSE, DAMP CONDITION.
9. GROUT SHALL CONFORM TO THE PROPORTION REQUIREMENTS OF ASTM C476. GROUT SHALL HAVE A **MINIMUM COMPRESSIVE STRENGTH (F'G) OF [2000 PSI] [2500 PSI] [3000 PSI]** AND MEET OR EXCEED THE MASONRY ASSEMBLY COMPRESSIVE STRENGTH (F'M).
10. PROVIDE MATERIAL SUBMITTALS AND/OR TEST REPORTS SHOWING COMPLIANCE WITH REFERENCED STANDARDS.
11. ALL MASONRY WORK SHALL BE LAID IN RUNNING BOND UNLESS NOTED OTHERWISE.
12. **[ALL MASONRY WORK BELOW GRADE SHALL BE SOLID OR HAVE SOLID GROUTED CORES.]**
13. GROUT PLACEMENT AND CONSOLIDATION SHALL CONFORM TO SECTION 3.5 IN TMS 602.
14. ALL GROUT SHALL BE PLACED OR SUPERVISED BY MASON CONTRACTOR CERTIFIED IN GROUT PLACEMENT BY AN APPROVED ORGANIZATION.
15. ALL WALLS SHALL BE ADEQUATELY BRACED IN ACCORDANCE WITH THE "STANDARD PRACTICE FOR BRACING MASONRY WALLS UNDER CONSTRUCTION" (DECEMBER 2012) PUBLISHED BY THE MASON CONTRACTORS ASSOCIATION OF AMERICA.
16. ALL WALLS SHALL RECEIVE THE MINIMUM SPECIFIED VERTICAL REINFORCEMENT AT EACH SIDE OF OPENINGS, CONTROL JOINTS, AND ALL CORNERS UNLESS NOTED OTHERWISE.
17. CONTACT THE ENGINEER FOR LINTELS OVER OPENINGS NOT SHOWN IN THE PLANS.
18. **CONTROL JOINTS SHALL BE INSTALLED AS SHOWN IN THE PLANS AND PER THE FOLLOWING REQUIREMENTS:**
    a. **MAXIMUM JOINT SPACING SHALL BE SPECIFIED ON STRUCTURAL DRAWINGS.**
    b. **JOINTS SHALL BE CONSTRUCTED USING GROUTED FLANGED UNITS [FORMED PAPER CONTROL JOINT] OR WITH PREFORMED HARD RUBBER GASKETS IN SASH UNITS, UNLESS NOTED OTHERWISE.**
    c. **DO NOT PLACE CONTROL JOINTS AT LINTEL ENDS UNLESS SPECIFICALLY NOTED.**
19. GROUT 24" WIDE BY 24" DEEP AT ALL BEAM BEARING LOCATIONS AND AT OTHER POINT LOAD LOCATIONS EXCEPT GROUTED BEARING ZONE MAY TERMINATE AT A SOLID GROUTED BOND BEAM COURSE THAT IS LESS THAN 24" BELOW THE BEARING POINT.
20. MASONRY JOINTS SHALL BE FULLY FILLED FOR SOLID UNITS AND FACE SHELL BEDDED WITH HEAD JOINT DEPTH EQUAL TO THE FACE SHELL OR GREATER FOR HOLLOW UNITS UNLESS NOTED OTHERWISE.
21. PROVIDE LADDER TYPE JOINT REINFORCEMENT WITH (1) 9 GA DEFORMED SIDE ROD IN EACH FACE UNLESS NOTED OTHERWISE. INSTALL JOINT REINFORCEMENT AT 16" ON CENTER VERTICALLY FOR UNITS WITH A NOMINAL HEIGHT OF 8" AND AT 12" ON CENTER VERTICALLY FOR UNITS WITH A NOMINAL HEIGHT OF 4" AND FOR CONCRETE MASONRY VENEERS, UNLESS NOTED OTHERWISE.
22. MASONRY CONSTRUCTION CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS SHALL BE VERIFIED IN ACCORDANCE WITH **'TABLE 4 – [LEVEL A] [LEVEL B] [LEVEL C] QUALITY ASSURANCE'** IN **'SPECIFICATIONS FOR MASONRY STRUCTURES (TMS 602-13)** AND BE CONDUCTED BY AN ICC CERTIFIED STRUCTURAL MASONRY SPECIAL INSPECTOR, OR APPROVED EQUAL.
23. THE CONTRACTOR SHALL ALLOW A 3 DAY CURING PERIOD OF MASONRY CONSTRUCTION PRIOR TO THE APPLICATION OF SURCHARGE LOADS.

MASONRY REINFORCEMENT

1. ALL STEEL REINFORCEMENT SHALL BE DEFORMED BARS CONFORMING TO ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE.
2. TIE WIRE SHALL CONFORM TO ASTM A1064.
3. HORIZONTAL JOINT REINFORCEMENT SHALL CONFORM WITH ASTM A1064 AND BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153.
4. DETAILING, BENDING AND PLACING OF STEEL REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF **"SPECIFICATION FOR MASONRY STRUCTURES" (TMS 602-13)**.
5. SUBMIT SHOP DRAWINGS INDICATING SIZE, LOCATION, AND DIMENSIONS OF REINFORCING STEEL FOR ALL REINFORCED MASONRY WALLS.
6. ALL STEEL REINFORCEMENT SHALL BE PLACED AND SUPPORTED AS NECESSARY TO MAINTAIN PROPER POSITION IN ACCORDANCE WITH **"SPECIFICATION FOR MASONRY STRUCTURES" (TMS 602-13)**.
7. ALL STEEL REINFORCEMENT MARKED OR SHOWN AS CONTINUOUS MAY BE SPLICED CONFORMING TO **"SPECIFICATION FOR MASONRY STRUCTURES" (TMS 602-13)**.
8. JOINT REINFORCEMENT SHALL BE LAPPED A MINIMUM OF 6".
9. USE PREFABRICATED JOINT REINFORCEMENT SECTIONS FOR INTERSECTING WALLS AND CORNERS, OR FOLLOW AN ESTABLISHED PROCEDURE FOR FIELD FABRICATING CORNERS.
10. ALL HORIZONTAL STEEL REINFORCEMENT SHALL BE CONTINUOUS AROUND CORNERS TO PROVIDE LAP LENGTHS IN ACCORDANCE WITH **"SPECIFICATION FOR MASONRY STRUCTURES" (TMS 602-13)** OR AS INDICATED IN THESE CONSTRUCTION DRAWINGS, UNLESS NOTED OTHERWISE.
11. CONTINUE ALL VERTICAL STEEL REINFORCEMENT FROM FOOTING TO BOND BEAM UNLESS NOTED OTHERWISE. WHERE TERMINATION OCCURS IN BOND BEAMS ENGAGE BOND BEAM STEEL WITH A STANDARD 90- OR 180-DEGREE HOOK.
12. SUPPORT REINFORCEMENT TO PREVENT DISPLACEMENT CAUSED BY CONSTRUCTION LOADS OR BY PLACEMENT OF GROUT OR MORTAR, BEYOND THE ALLOWABLE TOLERANCES IN ACCORDANCE WITH **"SPECIFICATION FOR MASONRY STRUCTURES" (TMS 602-13)**.
13. **DISCONTINUE ALL HORIZONTAL REINFORCEMENT AT CONTROL JOINTS EXCEPT AT DIAPHRAGM LEVELS UNLESS NOTED OTHERWISE.**
14. MASONRY REINFORCEMENT COVER:
    A. MASONRY FACE EXPOSED TO EARTH OR WEATHER, #6 BAR OR LARGER . . . . . 2"
    B. MASONRY FACE EXPOSED TO EARTH OR WEATHER, #5 BAR OR SMALLER . . . . . 1 1/2"
    C. MASONRY NOT EXPOSED TO EARTH OR WEATHER . . . . . 1 1/2"
    D. MASONRY JOINT REINFORCEMENT EXPOSED TO EARTH OR WEATHER . . . . . 5/8"
    E. MASONRY JOINT REINFORCEMENT NOT EXPOSED TO EARTH OR WEATHER . . . . . 1/2"

MINIMUM TESTS (LEVEL B)

VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) AS DELIVERED TO THE PROJECT SITE IN ACCORDANCE WITH ARTICLE 1.5.B.1.b.3 FOR SELF-CONSOLIDATING GROUT

VERIFICATION OF f_m' AND f_{AAC}' IN ACCORDANCE WITH ARTICLE 1.4 B PRIOR TO CONSTRUCTION, EXCEPT WHERE SPECIFCALLY EXEMPTED BY THE CODE

MINIMUM SPECIAL INSPECTION

INSPECTION TASK	FREQUENCY		REFERENCE	
	CONTINUOUS	PERIODIC	TMS 402	TMS 602
1. VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS		X		ART. 1.5
2. AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
A. PROPORTIONS OF SITE-PREPARED MORTAR		X		ART. 2.1, 2.6 A
B. CONSTRUCTION OF MORTAR JOINTS		X		ART. 3.3 B
C. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES		X		ART. 2.4 B, 2.4 H
D. LOCATION OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES		X		ART. 3.4, 3.6 A
E. PRESTRESSING TECHNIQUE		X		ART. 3.6 B
F. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY	X(1)	X		ART. 2.1 C
3. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
A. GROUT SPACE		X		ART. 3.2 D, 3.2 F
B. GRADE, TYPE, AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS, AND PRESTRESSING TENDONS AND ANCHORAGES		X	SEC. 6.1	ART. 2.4, 3.4
C. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES		X	SEC. 6.1, 6.2.1, 6.2.6, 6.2.7	ART. 3.2 E, 3.4, 3.6 A
D. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS		X		ART. 2.6 B, 2.4 G.1.b
E. CONSTRUCTION OF MORTAR JOINTS		X		ART. 3.3 B
4. VERIFY DURING CONSTRUCTION:				
A. SIZE AND LOCATION OF STRUCTURAL MEMBERS		X		ART. 3.3 F
B. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION		X	SEC. 1.2.1 (e), 6.1.4.3, 6.2.1	
C. WELDING OF REINFORCEMENT	X		SEC. 8.1.6.7.2, 9.3.3.4 (c), 11.3.3.4 (b)	
D. PPREPERATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40 DEGREES) OR HOT WEATHER (TEMPERATURE ABOVE 90 DEGREES)		X		ART. 1.8 C & 1.8 D
E. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE	X			ART. 3.6 B
F. PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS IS IN COMPLIANCE	X			ART. 3.5 & 3.6 C
G. PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS	X(1)	X		ART. 3.3 B.9 & 3.3 F.1.b
5. OBSERVE PREPERATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS		X		ART. 1.4 B.2.a.3, 1.4B.2.b.3, 1.4 B.2.c.3, 1.4 B.3 & 1.4 B.4

NOTES:
1. CONTINUOUS INSPECTION REQUIRED FOR THE FIRST 5000 SQUARE FEET OF AAC MASONRY, THEN PERIODIC AFTER THE FIRST 5000 SQUARE FEET.

MINIMUM TESTS (LEVEL C)

VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) AS DELIVERED TO THE PROJECT SITE IN ACCORDANCE WITH ARTICLE 1.5.B.1.b.3 FOR SELF-CONSOLIDATING GROUT

VERIFICATION OF f_m' AND f_{AAC}' IN ACCORDANCE WITH ARTICLE 1.4 B PRIOR TO CONSTRUCTION AND FOR EVERY 5,000 SQ. FT. DURING CONSTRUCTION

VERIFICATION OF PROPORTIONS OF MATERIALS IN PREMIXED OR PREBLENDED MORTAR, PRESTRESSING GROUT, AND GROUT OTHER THAN SELF-CONSOLIDATING GROUT, AS DELIVERED TO THE PROJECT SITE

MINIMUM SPECIAL INSPECTION

INSPECTION TASK	FREQUENCY		REFERENCE	
	CONTINUOUS	PERIODIC	TMS 402	TMS 602
1. VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS		X		ART. 1.5
2. VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
A. PROPORTIONS OF SITE-PREPARED MORTAR, GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS		X		ART. 2.1, 2.6 A, 2.6 B, 2.6 C, 2.4 G.1.b
B. GRADE, TYPE, AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS, AND PRESTRESSING TENDONS AND ANCHORAGES		X	SEC. 6.1	ART. 2.4, 3.4
C. PLACEMENT OF MASONRY UNITS AND CONSTRUCTION OF MORTAR JOINTS		X		ART. 3.3 B
D. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES	X		SEC. 6.1, 6.2.1, 6.2.6, 6.2.7	ART. 3.2 E, 3.4, 3.6 A
E. GROUT SPACE PRIOR TO GROUTING	X			ART. 3.2 D, 3.2 F
F. PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS	X			ART. 3.5, 3.6 C
G. SIZE AND LOCATION OF STRUCTURAL ELEMENTS		X		ART. 3.3 F
H. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION	X		SEC. 1.2.1 (e), 6.1.4.3, 6.2.1	
I. WELDING OF REINFORCEMENT	X		SEC. 8.1.6.7.2, 9.3.3.4 (c), 11.3.3.4 (b)	
J. PPREPERATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40 DEGREES) OR HOT WEATHER (TEMPERATURE ABOVE 90 DEGREES)		X		ART. 1.8 C & 1.8 D
K. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE	X			ART. 3.6 B
L. PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS	X			ART. 3.3 B.9 & 3.3 F.1.b
M. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY	X			ART. 2.1 C.1
3. OBSERVE PREPERATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS		X		ART. 1.4 B.2.a.3, 1.4B.2.b.3, 1.4 B.2.c.3, 1.4 B.3 & 1.4 B.4

1 MASONRY GENERAL NOTES
SCALE: 12" = 1'-0"

THE BEAUTY OF BLOCK DESIGN COLLECTIVE

DISCLAIMER: The Block Design Collective ("BDC") does not make any representations or warranties with respect to the accuracy or suitability of this information, and persons making use of this information do so at their own risk. BDC disclaims liability for damages of any kind, including any special, indirect, or consequential damages, which may result from use of this information. This information is not to be interpreted as indicating compliance with, or waiver of, any applicable building code, ordinance, standard or law.

MASONRY GENERAL NOTES (2013)

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RECOMMENDATION BASED ON MASONRY STRENGTH GAIN RESEARCH CONDUCTED BY CMHA.

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2. CONTRACTOR SHALL PROVIDE NECESSARY LABOR, MATERIALS AND EQUIPMENT TO LAY MASONRY AS SHOWN OR SPECIFIED IN THESE CONSTRUCTION DOCUMENTS.
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   A. THE MASONRY ASSEMBLY SHALL HAVE A **MINIMUM COMPRESSIVE STRENGTH (F'M) OF [2000 PSI] [2500 PSI] [3000 PSI]**.
   B. MASONRY ASSEMBLY COMPRESSIVE STRENGTH SHALL BE DEEMED TO COMPLY THROUGH THE USE OF MASONRY UNITS WITH A **NET AREA COMPRESSIVE STRENGTH OF [2000 PSI] [2500 PSI] [3000 PSI]** OR THROUGH MASONRY PRISM TESTING WITH PRIOR APPROVAL.
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   A. TYPE S FOR MASONRY BELOW GRADE OR IN CONTACT WITH EARTH
   B. TYPE S FOR UNREINFORCED MASONRY ABOVE GRADE
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7. TOOL MORTAR JOINTS TO A CONCAVE PROFILE, USING A JOINTER LARGER THAN JOINT THICKNESS, ON EXPOSED INTERIOR FACE OF WALL AND EXTERIOR EXPOSED FACE WHEN MORTAR IS THUMBPRINT HARD. STRIKE MORTAR JOINTS FLUSH ON EXTERIOR (CAVITY) FACE OF BACKUP WYTHE.
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10. PROVIDE MATERIAL SUBMITTALS AND/OR TEST REPORTS SHOWING COMPLIANCE WITH REFERENCED STANDARDS.
11. ALL MASONRY WORK SHALL BE LAID IN RUNNING BOND UNLESS NOTED OTHERWISE.
12. **[ALL MASONRY WORK BELOW GRADE SHALL BE SOLID OR HAVE SOLID GROUTED CORES.]**
13. GROUT PLACEMENT AND CONSOLIDATION SHALL CONFORM TO SECTION 3.5 IN TMS 602.
14. ALL GROUT SHALL BE PLACED OR SUPERVISED BY MASON CONTRACTOR CERTIFIED IN GROUT PLACEMENT BY AN APPROVED ORGANIZATION.
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   c. **DO NOT PLACE CONTROL JOINTS AT LINTEL ENDS UNLESS SPECIFICALLY NOTED.**
19. GROUT 24" WIDE BY 24" DEEP AT ALL BEAM BEARING LOCATIONS AND AT OTHER POINT LOAD LOCATIONS EXCEPT GROUTED BEARING ZONE MAY TERMINATE AT A SOLID GROUTED BOND BEAM COURSE THAT IS LESS THAN 24" BELOW THE BEARING POINT.
20. MASONRY JOINTS SHALL BE FULLY FILLED FOR SOLID UNITS AND FACE SHELL BEDDED WITH HEAD JOINT DEPTH EQUAL TO THE FACE SHELL OR GREATER FOR HOLLOW UNITS UNLESS NOTED OTHERWISE.
21. PROVIDE LADDER TYPE JOINT REINFORCEMENT WITH (1) 9 GA DEFORMED SIDE ROD IN EACH FACE UNLESS NOTED OTHERWISE. INSTALL JOINT REINFORCEMENT AT 16" ON CENTER VERTICALLY FOR UNITS WITH A NOMINAL HEIGHT OF 8" AND AT 12" ON CENTER VERTICALLY FOR UNITS WITH A NOMINAL HEIGHT OF 4" AND FOR CONCRETE MASONRY VENEERS, UNLESS NOTED OTHERWISE.
22. MASONRY CONSTRUCTION CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS SHALL BE VERIFIED IN ACCORDANCE WITH **TABLE 4 – [LEVEL 1] [LEVEL 2] LEVEL 3] QUALITY ASSURANCE** IN **"SPECIFICATIONS FOR MASONRY STRUCTURES (TMS 602-16)** AND BE CONDUCTED BY AN ICC CERTIFIED STRUCTURAL MASONRY SPECIAL INSPECTOR, OR APPROVED EQUAL.
23. THE CONTRACTOR SHALL ALLOW A 3 DAY CURING PERIOD OF MASONRY CONSTRUCTION PRIOR TO THE APPLICATION OF SURCHARGE LOADS.

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1. ALL STEEL REINFORCEMENT SHALL BE DEFORMED BARS CONFORMING TO ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE.
2. TIE WIRE SHALL CONFORM TO ASTM A1064.
3. HORIZONTAL JOINT REINFORCEMENT SHALL CONFORM WITH ASTM A1064 AND BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153.
4. DETAILING, BENDING AND PLACING OF STEEL REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF **"SPECIFICATION FOR MASONRY STRUCTURES" (TMS 602-16)**.
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6. ALL STEEL REINFORCEMENT SHALL BE PLACED AND SUPPORTED AS NECESSARY TO MAINTAIN PROPER POSITION IN ACCORDANCE WITH **"SPECIFICATION FOR MASONRY STRUCTURES" (TMS 602-16)**.
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8. JOINT REINFORCEMENT SHALL BE LAPPED A MINIMUM OF 6".
9. USE PREFABRICATED JOINT REINFORCEMENT SECTIONS FOR INTERSECTING WALLS AND CORNERS, OR FOLLOW AN ESTABLISHED PROCEDURE FOR FIELD FABRICATING CORNERS.
10. ALL HORIZONTAL STEEL REINFORCEMENT SHALL BE CONTINUOUS AROUND CORNERS TO PROVIDE LAP LENGTHS IN ACCORDANCE WITH **"SPECIFICATION FOR MASONRY STRUCTURES" (TMS 602-16)** OR AS INDICATED IN THESE CONSTRUCTION DRAWINGS, UNLESS NOTED OTHERWISE.
11. CONTINUE ALL VERTICAL STEEL REINFORCEMENT FROM FOOTING TO BOND BEAM UNLESS NOTED OTHERWISE. WHERE TERMINATION OCCURS IN BOND BEAMS ENGAGE BOND BEAM STEEL WITH A STANDARD 90- OR 180-DEGREE HOOK.
12. SUPPORT REINFORCEMENT TO PREVENT DISPLACEMENT CAUSED BY CONSTRUCTION LOADS OR BY PLACEMENT OF GROUT OR MORTAR, BEYOND THE ALLOWABLE TOLERANCES IN ACCORDANCE WITH **"SPECIFICATION FOR MASONRY STRUCTURES" (TMS 602-16)**.
13. **DISCONTINUE ALL HORIZONTAL REINFORCEMENT AT CONTROL JOINTS EXCEPT AT DIAPHRAGM LEVELS UNLESS NOTED OTHERWISE.**
14. MASONRY REINFORCEMENT COVER:
   A. MASONRY FACE EXPOSED TO EARTH OR WEATHER, #6 BAR OR LARGER . . . . . 2"
   B. MASONRY FACE EXPOSED TO EARTH OR WEATHER, #5 BAR OR SMALLER . . . . . 1 1/2"
   C. MASONRY NOT EXPOSED TO EARTH OR WEATHER . . . . . 1 1/2"
   D. MASONRY JOINT REINFORCEMENT EXPOSED TO EARTH OR WEATHER . . . . . 5/8"
   E. MASONRY JOINT REINFORCEMENT NOT EXPOSED TO EARTH OR WEATHER . . . . . 1/2"

DESIGNER NOTE:
THE 2016 AND EARLIER VERSIONS OF TMS 602 REQUIRED A 6 IN. LAP FOR JOINT REINFORCEMENT AND THIS WAS REVISED TO 8 IN. IN THE 2022 VERSION.

DESIGNER NOTE:
VERIFY THAT REINFORCEMENT COVER IS ADEQUATE FOR FIRE-RATED WALLS IN ACCORDANCE WITH ACI/TMS 216.1

1 MASONRY GENERAL NOTES
SCALE: 12" = 1'-0"

MINIMUM TESTS (LEVEL 2)
VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) AS DELIVERED TO THE PROJECT SITE IN ACCORDANCE WITH ARTICLE 1.5 & 1.6.3 FOR SELF-CONSOLIDATING GROUT
VERIFICATION OF f'_m AND f'_{AAC} IN ACCORDANCE WITH ARTICLE 1.4B PRIOR TO CONSTRUCTION, EXCEPT WHERE SPECIFICALLY EXEMPTED BY THE CODE
VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS PRIOR TO CONSTRUCTION IN ACCORDANCE WITH ARTICLE 1.5

MINIMUM SPECIAL INSPECTION

INSPECTION TASK	FREQUENCY		REFERENCE	
	CONTINUOUS	PERIODIC	TMS 402	TMS 602
1. AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
A. PROPORTIONS OF SITE-PREPARED MORTAR		X		ART. 2.1, 2.6 A, & 2.6 C
B. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES		X		ART. 2.4 B, 2.4 H
C. GRADE, TYPE AND SIZE OF REINFORCEMENT, CONNECTORS, ANCHOR BOLTS, AND PRESTRESSING TENDONS AND ANCHORAGES		X		ART. 3.4 & 3.6 A
D. PRESTRESSING TECHNIQUE		X		ART. 3.6 B
E. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY	X[1)]	X		ART. 2.1 C.1
F. SAMPLE PANEL CONSTRUCTION		X		ART. 1.6 D
2. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
A. GROUT SPACE		X		ART. 3.2 D & 3.2 F
B. PLACEMENT OF PRESTRESSING TENDONS AND ANCHORAGES		X		ART. 2.4 & 3.6
C. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND ANCHOR BOLTS		X	SEC. 6.1, 6.3.1, 6.3.6, & 6.3.7	ART. 3.2 E & 3.4
D. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS		X		ART. 2.6 B & 2.4 G.1.b
3. VERIFY COMPLIANCE OF THE FOLLOWING DURING CONSTRUCTION:				
A. MATERIALS AND PROCEDURES WITH THE APPROVED SUBMITTALS		X		ART. 1.5
B. PLACEMENT OF MASONRY UNITS AND MORTAR JOINTS CONSTRUCTION		X		ART. 3.3 B
C. SIZE AND LOCATION OF STRUCTURAL MEMBERS		X		ART. 3.3 F
D. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION		X	SEC. 1.2.1 (e), 6.2.1, & 6.3.1	
E. WELDING OF REINFORCEMENT	X		SEC. 6.1.6.1.2	
F. PPREPERATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40 DEGREES) OR HOT WEATHER (TEMPERATURE ABOVE 90 DEGREES)		X		ART. 1.8 C & 1.8 D
H. PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS IS IN COMPLIANCE	X			ART. 3.5 & 3.6 C
I. PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS	X[1)]	X		ART. 3.3 B.9 & 3.3 F.1.b
4. OBSERVE PREPERATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS		X		ART. 1.4 B.2.a.3, 1.4B.2.b.3, 1.4.B.2.c.3, 1.4 B.3 & 1.4 B.4

NOTES:
1. CONTINUOUS INSPECTION REQUIRED FOR THE FIRST 5000 SQUARE FEET OF AAC MASONRY, THEN PERIODIC AFTER THE FIRST 5000 SQUARE FEET.

MINIMUM TESTS (LEVEL 3)
VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) AS DELIVERED TO THE PROJECT SITE IN ACCORDANCE WITH ARTICLE 1.5 & 1.6.3 FOR SELF-CONSOLIDATING GROUT
VERIFICATION OF f'_m AND f'_{AAC} IN ACCORDANCE WITH ARTICLE 1.4B PRIOR TO CONSTRUCTION, EXCEPT WHERE SPECIFICALLY EXEMPTED BY THE CODE
VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS PRIOR TO CONSTRUCTION IN ACCORDANCE WITH ARTICLE 1.5
DURING CONSTRUCTION, VERIFICATION OF f'_m AND f'_{AAC} FOR EVERY 5,000 SQ. FT.
DURING CONSTRUCTION, VERIFICATION OF PROPORTIONS OF MATERIALS AS DELIVERED TO THE PROJECT SITE FOR PREMIXED OR PREBLENDED MORTAR, PRESTRESSING GROUT, AND GROUT OTHER THAN SELF-CONSOLIDATING GROUT.

MINIMUM SPECIAL INSPECTION

INSPECTION TASK	FREQUENCY		REFERENCE	
	CONTINUOUS	PERIODIC	TMS 402	TMS 602
1. AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
A. PROPORTIONS OF SITE-PREPARED MORTAR		X		ART. 2.1, 2.6 A, & 2.6 C
B. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES		X		ART. 2.4 B, 2.4 H
C. GRADE, TYPE AND SIZE OF REINFORCEMENT, CONNECTORS, ANCHOR BOLTS, AND PRESTRESSING TENDONS AND ANCHORAGES		X		ART. 3.4 & 3.6 A
D. PRESTRESSING TECHNIQUE		X		ART. 3.6 B
E. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY	X[1)]	X		ART. 2.1 C.1
F. SAMPLE PANEL CONSTRUCTION	X			ART. 1.6 D
2. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
A. GROUT SPACE	X			ART. 3.2 D & 3.2 F
B. PLACEMENT OF PRESTRESSING TENDONS AND ANCHORAGES		X	SEC. 10.8 & 10.9	ART. 2.4 & 3.6
C. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND ANCHOR BOLTS	X		SEC. 6.1, 6.3.1, 6.3.6, & 6.3.7	ART. 3.2 E & 3.4
D. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS		X		ART. 2.6 B & 2.4 G.1.b
3. VERIFY COMPLIANCE OF THE FOLLOWING DURING CONSTRUCTION:				
A. MATERIALS AND PROCEDURES WITH THE APPROVED SUBMITTALS		X		ART. 1.5
B. PLACEMENT OF MASONRY UNITS AND MORTAR JOINTS CONSTRUCTION		X		ART. 3.3 B
C. SIZE AND LOCATION OF STRUCTURAL MEMBERS		X		ART. 3.3 F
D. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION	X		SEC. 1.2.1 (e), 6.2.1, & 6.3.1	
E. WELDING OF REINFORCEMENT	X		SEC. 6.1.6.1.2	
F. PPREPERATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40 DEGREES) OR HOT WEATHER (TEMPERATURE ABOVE 90 DEGREES)		X		ART. 1.8 C & 1.8 D
H. PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS IS IN COMPLIANCE	X			ART. 3.5 & 3.6 C
I. PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS	X[1)]	X		ART. 3.3 B.9 & 3.3 F.1.b
4. OBSERVE PREPERATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS	X			ART. 1.4 B.2.a.3, 1.4B.2.b.3, 1.4.B.2.c.3, 1.4 B.3 & 1.4 B.4

NOTES:
1. CONTINUOUS INSPECTION REQUIRED FOR THE FIRST 5000 SQUARE FEET OF AAC MASONRY, THEN PERIODIC AFTER THE FIRST 5000 SQUARE FEET.

THE BEAUTY OF BLOCK DESIGN COLLECTIVE

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MASONRY GENERAL NOTES (2016)

DESIGNER NOTE:
TMS 602 TOLERANCES ARE GENERALLY FOR STRUCTURAL MASONRY AND NOT FOR MASONRY VENEER. COORDINATION IS REQUIRED BETWEEN THE SPECIFICAITON AND GENERAL NOTES.

DESIGNER NOTE:
HOT/COLD WEATHER PROCEDURES ARE OFTEN REQUIRED AS A SUBMITTAL ON PROJECTS.

DESIGNER NOTE:
CONTACT BDC OR LOCAL MASONRY ASSOCIATION FOR REPRESENTATIVE COMPRESSIVE STRENGTHS FOR PROJECT LOCATION.

DESIGNER NOTE:
ASTM C270 ALLOWS 3 TYPES OF CEMENT TO BE USED IN MORTAR. TMS 402/602 HAS RESTRICTIONS ON MASONRY CEMENT BASED ON SEISMIC DESIGN CATEGORY. CONTACT BDC FOR MORE INFORMATION.

DESIGNER NOTE:
GROUT COMPRESSIVE STRENGTH IS COMMONLY SPECIFIED TO MEET OR EXCEED F'M.

DESIGNER NOTE:
GROUT CERTIFICATION TRAINING IS OFFERED BY VARIOUS ORGANIZATIONS INCLUDING THE IMI AND MIM.

DESIGNER NOTE:
FEDERAL OSHA REQUIRES WALLS WITH HEIGHTS EXCEEDING 8'-0" TO BE BRACED UNTIL FINAL LATERAL SUPPORT IS ACHIEVED.

DESIGNER NOTE:
TMS REQUIRES THE DESIGNER TO SHOW THE TYPE AND LOCATION OF MOVEMENT JOINTS IN THE PROJECT DRAWINGS.

DESIGNER NOTE:
CMU-TEC-009-25 HAS ADDITIONAL INFORMATION ON HORIZONTAL JOINT REINFORCEMENT REQUIREMENTS.

DESIGNER NOTE:
MINIMUM QUALITY ASSURANCE LEVEL IS DETERMINED BASED ON TMS 402 TABLE 3.1 AND DEPENDENT ON RISK CATEGORY.

DESIGNER NOTE:
RECOMMENDATION BASED ON MASONRY STRENGTH GAIN RESEARCH CONDUCTED BY CMHA.

DESIGNER NOTE:
THE 2022 VERSION OF TMS 402/602 INCLUDES PROVISIONS FOR GFRP

DESIGNER NOTE:
VERIFY THAT REINFORCEMENT COVER IS ADEQUATE FOR FIRE-RATED WALLS IN ACCORDANCE WITH ACI/TMS 216.1

MASONRY

1. MASONRY CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE MORE STRINGENT PROVISIONS OF CHAPTER 21 OF THE **2024 INTERNATIONAL BUILDING CODE** AND THE REQUIREMENTS OF THE **"SPECIFICATION FOR MASONRY STRUCTURES (TMS 602-22)"** PUBLISHED BY THE MASONRY SOCIETY, LONGMONT, COLORADO, EXCEPT AS MODIFIED BY THE REQUIREMENTS OF THESE CONTRACT DOCUMENTS.
2. CONTRACTOR SHALL PROVIDE NECESSARY LABOR, MATERIALS AND EQUIPMENT TO LAY MASONRY AS SHOWN OR SPECIFIED IN THESE CONSTRUCTION DOCUMENTS.
3. ALL WORK SHALL BE LAID TRUE TO A LINE, PLUMB AND LEVEL IN KEEPING WITH THE TOLERANCES GIVEN IN **"SPECIFICATIONS FOR MASONRY STRUCTURES (TMS 602-22)**.
4. EMPLOY HOT OR COLD WEATHER CONSTRUCTION PRACTICES AS DEFINED IN TMS 602 WHEN AMBIENT AIR TEMPERATURE EXCEEDS 100°F OR IS BELOW 40°F.
5. CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90.
   A. THE MASONRY ASSEMBLY SHALL HAVE A **MINIMUM COMPRESSIVE STRENGTH (F'M) OF [2000 PSI] [2500 PSI] [3000 PSI]**.
   B. MASONRY ASSEMBLY COMPRESSIVE STRENGTH SHALL BE DEEMED TO COMPLY THROUGH THE USE OF MASONRY UNITS WITH A **NET AREA COMPRESSIVE STRENGTH OF [2000 PSI] [2500 PSI] [3000 PSI]** OR THROUGH MASONRY PRISM TESTING WITH PRIOR APPROVAL.
6. MORTAR SHALL BE OF MATERIALS AND PROPORTIONED IN COMPLIANCE WITH THE PROPORTION SPECIFICATIONS OF ASTM C270 AND SHALL BE OF THE FOLLOWING TYPE BASED ON APPLICATION:
   A. TYPE S FOR MASONRY BELOW GRADE OR IN CONTACT WITH EARTH
   B. TYPE S FOR UNREINFORCED MASONRY ABOVE GRADE
   C. TYPE S FOR REINFORCED MASONRY ABOVE GRADE
   D. TYPE N FOR VENEER MASONRY
7. TOOL MORTAR JOINTS TO A CONCAVE PROFILE, USING A JOINTER LARGER THAN JOINT THICKNESS, ON EXPOSED INTERIOR FACE OF WALL AND EXTERIOR EXPOSED FACE WHEN MORTAR IS THUMBPRINT HARD. STRIKE MORTAR JOINTS FLUSH ON EXTERIOR (CAVITY) FACE OF BACKUP WYTHE.
8. SAND FOR MORTAR SHALL CONFORM TO ASTM C144 AND SHALL BE MEASURED IN LOOSE, DAMP CONDITION.
9. GROUT SHALL CONFORM TO THE PROPORTION REQUIREMENTS OF ASTM C476. GROUT SHALL HAVE A **MINIMUM COMPRESSIVE STRENGTH (F'G) OF [2000 PSI] [2500 PSI] [3000 PSI]** AND MEET OR EXCEED THE MASONRY ASSEMBLY COMPRESSIVE STRENGTH (F'M).
10. PROVIDE MATERIAL SUBMITTALS AND/OR TEST REPORTS SHOWING COMPLIANCE WITH REFERENCED STANDARDS.
11. ALL MASONRY WORK SHALL BE LAID IN RUNNING BOND UNLESS NOTED OTHERWISE.
12. **[ALL MASONRY WORK BELOW GRADE SHALL BE SOLID OR HAVE SOLID GROUTED CORES.]**
13. GROUT PLACEMENT AND CONSOLIDATION SHALL CONFORM TO SECTION 3.5 IN TMS 602.
14. ALL GROUT SHALL BE PLACED OR SUPERVISED BY MASON CONTRACTOR CERTIFIED IN GROUT PLACEMENT BY AN APPROVED ORGANIZATION.
15. ALL WALLS SHALL BE ADEQUATELY BRACED IN ACCORDANCE WITH THE "STANDARD PRACTICE FOR BRACING MASONRY WALLS UNDER CONSTRUCTION" (DECEMBER 2012) PUBLISHED BY THE MASON CONTRACTORS ASSOCIATION OF AMERICA.
16. ALL WALLS SHALL RECEIVE THE MINIMUM SPECIFIED VERTICAL REINFORCEMENT AT EACH SIDE OF OPENINGS, CONTROL JOINTS, AND ALL CORNERS UNLESS NOTED OTHERWISE.
17. CONTACT THE ENGINEER FOR LINTELS OVER OPENINGS NOT SHOWN IN THE PLANS.
18. **CONTROL JOINTS SHALL BE INSTALLED AS SHOWN IN THE PLANS AND PER THE FOLLOWING REQUIREMENTS:**
    a. **MAXIMUM JOINT SPACING SHALL BE SPECIFIED ON STRUCTURAL DRAWINGS.**
    b. **JOINTS SHALL BE CONSTRUCTED USING GROUTED FLANGED UNITS (FORMED PAPER CONTROL JOINT) OR WITH PREFORMED HARD RUBBER GASKETS IN SASH UNITS, UNLESS NOTED OTHERWISE.**
    c. **DO NOT PLACE CONTROL JOINTS AT LINTEL ENDS UNLESS SPECIFICALLY NOTED.**
19. GROUT 24" WIDE BY 24" DEEP AT ALL BEAM BEARING LOCATIONS AND AT OTHER POINT LOAD LOCATIONS EXCEPT GROUTED BEARING ZONE MAY TERMINATE AT A SOLID GROUTED BOND BEAM COURSE THAT IS LESS THAN 24" BELOW THE BEARING POINT.
20. MASONRY JOINTS SHALL BE FULLY FILLED FOR SOLID UNITS AND FACE SHELL BEDDED WITH HEAD JOINT DEPTH EQUAL TO THE FACE SHELL OR GREATER FOR HOLLOW UNITS UNLESS NOTED OTHERWISE.
21. PROVIDE LADDER TYPE JOINT REINFORCEMENT WITH (1) 9 GA DEFORMED SIDE ROD IN EACH FACE UNLESS NOTED OTHERWISE. INSTALL JOINT REINFORCEMENT AT 16" ON CENTER VERTICALLY FOR UNITS WITH A NOMINAL HEIGHT OF 8" AND AT 12" ON CENTER VERTICALLY FOR UNITS WITH A NOMINAL HEIGHT OF 4" AND FOR CONCRETE MASONRY VENEERS, UNLESS NOTED OTHERWISE.
22. MASONRY CONSTRUCTION CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS SHALL BE VERIFIED IN ACCORDANCE WITH **"TABLE 4 – [LEVEL 1] [LEVEL 2] [LEVEL 3] QUALITY ASSURANCE"** IN **"SPECIFICATIONS FOR MASONRY STRUCTURES (TMS 602-22)** AND BE CONDUCTED BY AN ICC CERTIFIED STRUCTURAL MASONRY SPECIAL INSPECTOR, OR APPROVED EQUAL.
23. THE CONTRACTOR SHALL ALLOW A 3 DAY CURING PERIOD OF MASONRY CONSTRUCTION PRIOR TO THE APPLICATION OF SURCHARGE LOADS.

MASONRY REINFORCEMENT

1. ALL STEEL REINFORCEMENT SHALL BE DEFORMED BARS CONFORMING TO ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE.
2. TIE WIRE SHALL CONFORM TO ASTM A82.
3. HORIZONTAL JOINT REINFORCEMENT SHALL CONFORM WITH ASTM A82 AND BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153.
4. DETAILING, BENDING AND PLACING OF STEEL REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF **"SPECIFICATION FOR MASONRY STRUCTURES" (TMS 602-22)**.
5. SUBMIT SHOP DRAWINGS INDICATING SIZE, LOCATION, AND DIMENSIONS OF REINFORCING STEEL FOR ALL REINFORCED MASONRY WALLS.
6. ALL STEEL REINFORCEMENT SHALL BE PLACED AND SUPPORTED AS NECESSARY TO MAINTAIN PROPER POSITION IN ACCORDANCE WITH **"SPECIFICATION FOR MASONRY STRUCTURES" (TMS 602-22)**.
7. ALL STEEL REINFORCEMENT MARKED OR SHOWN AS CONTINUOUS MAY BE SPLICED CONFORMING TO **"SPECIFICATION FOR MASONRY STRUCTURES" (TMS 602-22)**.
8. JOINT REINFORCEMENT SHALL BE LAPPED A MINIMUM OF 8".
9. USE PREFABRICATED JOINT REINFORCEMENT SECTIONS FOR INTERSECTING WALLS AND CORNERS, OR FOLLOW AN ESTABLISHED PROCEDURE FOR FIELD FABRICATING CORNERS.
10. ALL HORIZONTAL STEEL REINFORCEMENT SHALL BE CONTINUOUS AROUND CORNERS TO PROVIDE LAP LENGTHS IN ACCORDANCE WITH **"SPECIFICATION FOR MASONRY STRUCTURES" (TMS 602-22)** OR AS INDICATED IN THESE CONSTRUCTION DRAWINGS, UNLESS NOTED OTHERWISE.
11. CONTINUE ALL VERTICAL STEEL REINFORCEMENT FROM FOOTING TO BOND BEAM UNLESS NOTED OTHERWISE. WHERE TERMINATION OCCURS IN BOND BEAMS ENGAGE BOND BEAM STEEL WITH A STANDARD 90- OR 180-DEGREE HOOK.
12. SUPPORT REINFORCEMENT TO PREVENT DISPLACEMENT CAUSED BY CONSTRUCTION LOADS OR BY PLACEMENT OF GROUT OR MORTAR, BEYOND THE ALLOWABLE TOLERANCES IN ACCORDANCE WITH **"SPECIFICATION FOR MASONRY STRUCTURES" (TMS 602-22)**.
13. **DISCONTINUE ALL HORIZONTAL REINFORCEMENT AT CONTROL JOINTS EXCEPT AT DIAPHRAGM LEVELS UNLESS NOTED OTHERWISE.**
14. MASONRY REINFORCEMENT COVER:
    A. MASONRY FACE EXPOSED TO EARTH OR WEATHER, #6 BAR OR LARGER . . . . . 2"
    B. MASONRY FACE EXPOSED TO EARTH OR WEATHER, #5 BAR OR SMALLER . . . . . 1 1/2"
    C. MASONRY NOT EXPOSED TO EARTH OR WEATHER . . . . . 1 1/2"
    D. MASONRY JOINT REINFORCEMENT EXPOSED TO EARTH OR WEATHER . . . . 5/8"
    E. MASONRY JOINT REINFORCEMENT NOT EXPOSED TO EARTH OR WEATHER . . . . . 1/2"

MINIMUM TESTS (LEVEL 2)

VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) AS DELIVERED TO THE PROJECT SITE IN ACCORDANCE WITH ARTICLE 1.5 & 1.6.3 FOR SELF-CONSOLIDATING GROUT

VERIFICATION OF f'_m AND f'_{AAC} IN ACCORDANCE WITH ARTICLE 1.4 B PRIOR TO CONSTRUCTION, EXCEPT WHERE SPECIFCALLY EXEMPTED BY THE CODE

VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS PRIOR TO CONSTRUCTION IN ACCORDANCE WITH ARTICLE 1.5

MINIMUM SPECIAL INSPECTION

INSPECTION TASK	FREQUENCY		REFERENCE	
	CONTINUOUS	PERIODIC	TMS 402	TMS 602
1. AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
A. PROPORTIONS OF SITE-PREPARED MORTAR		X		ART. 2.1 & 2.6 A & C
B. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES		X		ART. 2.4 B & 2.4 M & N
C. GRADE, TYPE AND SIZE OF REINFORCEMENT, CONNECTORS, ANCHOR BOLTS		X		ART. 2.4 A, D, E, F, G, H, I, J, K, & L
D. PRESTRESSING TECHNIQUE		X		ART. 3.6 B
E. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY	X(1)	X		ART. 2.1 C.1
F. SAMPLE PANEL CONSTRUCTION		X		ART. 1.6 D
2. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
A. GROUT SPACE		X		ART. 3.2 D & 3.2 F
B. PLACEMENT OF PRESTRESSING TENDONS AND ANCHORAGES		X	SEC. 10.8 & 10.9	ART. 3.6
C. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND ANCHOR BOLTS		X	SEC. 6.1, 6.3.1, 6.3.6, & 6.3.7	ART. 3.2 E & 3.4
D. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS		X		ART. 2.6 B & 2.4 M.1.b
3. VERIFY COMPLIANCE OF THE FOLLOWING DURING CONSTRUCTION:				
A. MATERIALS AND PROCEDURES WITH THE APPROVED SUBMITTALS		X		ART. 1.5
B. PLACEMENT OF MASONRY UNITS AND MORTAR JOINT CONSTRUCTION		X		ART. 3.3 B
C. SIZE AND LOCATION OF STRUCTURAL MEMBERS		X		ART. 3.3 G
D. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION		X	SEC. 1.2.1 (e), 6.2.1, & 6.3.1	
E. TYPE, SIZE, AND LOCATION OF VENEER TIES & MOVEMENT JOINTS		X(2)	SEC. 13.2	ART. 3.4 D
F. INSTALLATION OF ADHERED VENEER		X(2)	SEC. 13.3	ART. 3.3 D
G. WELDING OF REINFORCEMENT	X		SEC. 6.1.7.3	
H. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40 DEGREES) OR HOT WEATHER (TEMPERATURE ABOVE 90 DEGREES)		X		ART. 1.8 C & D
I. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE	X			ART. 3.6 B
J. PLACEMENT OF GROUT	X			ART. 3.5
K. PLACEMENT PRESTRESSING GROUT FOR BONDED TENDONS	X			ART. 3.6 C
L. PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS	X(1)	X		ART. 3.3 B.8 & 3.3 G.1.b
4. OBSERVE PREPERATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS		X		ART. 1.4 B.2.a.3, B.2.b.3, B.2.c.3, B.3, & B.4

NOTES:
1. CONTINUOUS INSPECTION REQUIRED FOR THE FIRST 5000 SQUARE FEET OF AAC MASONRY, THEN PERIODIC AFTER THE FIRST 5000 SQUARE FEET.
2. PERIODIC INSPECTION OF VENEERS IS REQUIRED WHEN THE HEIGHT OF THE VENEER EXCEEDS 60 FT. ABOVE THE GRADE PLANE.

MINIMUM TESTS (LEVEL 3)

VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) AS DELIVERED TO THE PROJECT SITE IN ACCORDANCE WITH ARTICLE 1.5 & 1.6.3 FOR SELF-CONSOLIDATING GROUT

VERIFICATION OF f'_m AND f'_{AAC} IN ACCORDANCE WITH ARTICLE 1.4 B PRIOR TO CONSTRUCTION, EXCEPT WHERE SPECIFCALLY EXEMPTED BY THE CODE

VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS PRIOR TO CONSTRUCTION IN ACCORDANCE WITH ARTICLE 1.5

DURING CONSTRUCTION, VERIFICATION OF f'_m AND f'_{AAC} FOR EVERY 5,000 SQ. FT.

DURING CONSTRUCTION, VERIFICATION OF PROPORTIONS OF MATERIALS AS DELIVERED TO THE PROJECT SITE FOR PREMIXED OR PREBLENDED MORTAR, PRESTRESSING GROUT, AND GROUT OTHER THAN SELF-CONSOLIDATING GROUT.

MINIMUM SPECIAL INSPECTION

INSPECTION TASK	FREQUENCY		REFERENCE	
	CONTINUOUS	PERIODIC	TMS 402	TMS 602
1. AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
A. PROPORTIONS OF SITE-PREPARED MORTAR		X		ART. 2.1 & 2.6 A & C
B. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES		X		ART. 2.4 B & 2.4 M & N
C. GRADE, TYPE AND SIZE OF REINFORCEMENT, CONNECTORS, ANCHOR BOLTS		X		ART. 2.4 A, D, E, F, G, H, I, J, K, & L
D. PRESTRESSING TECHNIQUE		X		ART. 3.6 B
E. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY	X(1)	X		ART. 2.1 C.1
F. SAMPLE PANEL CONSTRUCTION		X		ART. 1.6 D
2. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
A. GROUT SPACE		X		ART. 3.2 D & 3.2 F
B. PLACEMENT OF PRESTRESSING TENDONS AND ANCHORAGES		X	SEC. 10.8 & 10.9	ART. 3.6
C. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND ANCHOR BOLTS		X	SEC. 6.1, 6.3.1, 6.3.6, & 6.3.7	ART. 3.2 E & 3.4
D. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS		X		ART. 2.6 B & 2.4 M.1.b
3. VERIFY COMPLIANCE OF THE FOLLOWING DURING CONSTRUCTION:				
A. MATERIALS AND PROCEDURES WITH THE APPROVED SUBMITTALS		X		ART. 1.5
B. PLACEMENT OF MASONRY UNITS AND MORTAR JOINT CONSTRUCTION		X		ART. 3.3 B
C. SIZE AND LOCATION OF STRUCTURAL MEMBERS		X		ART. 3.3 G
D. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION		X	SEC. 1.2.1 (e), 6.2.1, & 6.3.1	
E. TYPE, SIZE, AND LOCATION OF VENEER TIES & MOVEMENT JOINTS		X(2)	SEC. 13.2	ART. 3.4 D
F. INSTALLATION OF ADHERED VENEER		X(2)	SEC. 13.3	ART. 3.3 D
G. WELDING OF REINFORCEMENT	X		SEC. 6.1.7.3	
H. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40 DEGREES) OR HOT WEATHER (TEMPERATURE ABOVE 90 DEGREES)		X		ART. 1.8 C & D
I. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE	X			ART. 3.6 B
J. PLACEMENT OF GROUT	X			ART. 3.5
K. PLACEMENT PRESTRESSING GROUT FOR BONDED TENDONS	X			ART. 3.6 C
L. PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS	X(1)	X		ART. 3.3 B.8 & 3.3 G.1.b
4. OBSERVE PREPERATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS		X		ART. 1.4 B.2.a.3, B.2.b.3, B.2.c.3, B.3, & B.4

NOTES:
1. CONTINUOUS INSPECTION REQUIRED FOR THE FIRST 5000 SQUARE FEET OF AAC MASONRY, THEN PERIODIC AFTER THE FIRST 5000 SQUARE FEET.
2. PERIODIC INSPECTION OF VENEERS IS REQUIRED WHEN THE HEIGHT OF THE VENEER EXCEEDS 60 FT. ABOVE THE GRADE PLANE.

1 MASONRY GENERAL NOTES
SCALE: 1/2" = 1'-0"

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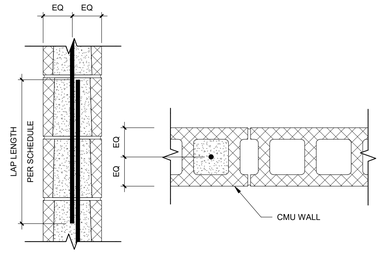
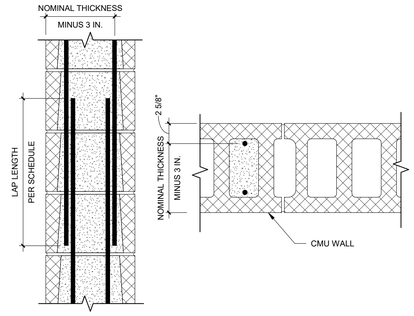
MASONRY GENERAL NOTES (2022)



LAP SPLICE & DEVELOPMENT LENGTH (IN.)[1,2,3,4], CENTERED BAR						
BAR SIZE	CONCRETE MASONRY NOMINAL THICKNESS					
	6-INCH	8-INCH	10-INCH	12-INCH	14-INCH	16-INCH
#3	12	12	12	12	12	12
#4	18	13	12	12	12	12
#5	28	20	16	13	13	13
#6	53	38	29	24	20	20
#7	-	52	40	33	28	28
#8	-	79	61	50	42	42
#9	-	-	79	64	54	54

NOTES:

1. LENGTHS ARE CALCULATED BASED ON A SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE MASONRY (f'_m) OF 2000 PSI AND A SPECIFIED YIELD STRENGTH OF 60,000 PSI FOR STEEL REINFORCEMENT.
2. DEVELOPMENT AND LAP LENGTH OF EPOXY-COATED BARS SHALL BE TAKEN AS 150 PERCENT OF THE LENGTH SHOWN.
3. MECHANICAL SPLICES SHALL HAVE THE BARS CONNECTED TO DEVELOP AT LEAST 125 PERCENT OF THE SPECIFIED YIELD STRENGTH OF THE BAR.
4. IF THE SPACING BETWEEN ADJACENT SPLICES IS LESS THAN $9d_b$ AND THE MINIMUM MASONRY COVER, STAGGER LAP SPLICES.



LAP SPLICE & DEVELOPMENT LENGTH (IN.)[1,2,3,4], OFFSET BAR						
BAR SIZE	CONCRETE MASONRY NOMINAL THICKNESS					
	6-INCH	8-INCH	10-INCH	12-INCH	14-INCH	16-INCH
#3	-	-	12	12	12	12
#4	-	-	19	19	19	19
#5	-	-	30	30	30	30
#6	-	-	57	57	57	57
#7	-	-	-	80	80	80
#8	-	-	-	-	-	124
#9	-	-	-	-	-	-

NOTES:

1. LENGTHS ARE CALCULATED BASED ON A SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE MASONRY (f'_m) OF 2000 PSI AND A SPECIFIED YIELD STRENGTH OF 60,000 PSI FOR STEEL REINFORCEMENT.
2. DEVELOPMENT AND LAP LENGTH OF EPOXY-COATED BARS SHALL BE TAKEN AS 150 PERCENT OF THE LENGTH SHOWN.
3. MECHANICAL SPLICES SHALL HAVE THE BARS CONNECTED TO DEVELOP AT LEAST 125 PERCENT OF THE SPECIFIED YIELD STRENGTH OF THE BAR.
4. IF THE SPACING BETWEEN ADJACENT SPLICES IS LESS THAN $9d_b$ AND THE MINIMUM MASONRY COVER, STAGGER LAP SPLICES.

DESIGNER NOTES:

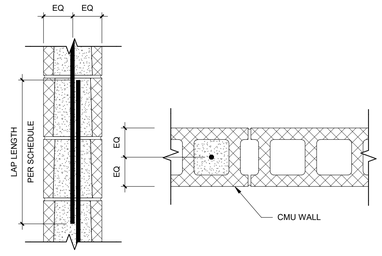
CODE REQUIREMENTS
1. REINFORCEMENT BAR SIZE WAS LIMITED TO #9 BASED ON STRENGTH DESIGN PROVISIONS, THOUGH LARGER BAR SIZES ARE POSSIBLE IF ALLOWABLE STRESS DESIGN PROVISIONS ARE USED.
2. CELLS WITH "-" INDICATE LOCATIONS WHERE THE REINFORCEMENT SIZE IS LIMITED BY CELL WIDTH, CLEAR SPACE, AREA OF VERTICAL REINFORCEMENT, OR BAR DIAMETER. REFERNECE TMS 402 SECTION 6.1 FOR ADDITIONAL INFORMATION.

CALCULATIONS
1. LAP SPLICE LENGTHS ARE CALCULATED BASED ON 2016 TMS 402 EQUATION 6-1, AND A REFERENCE EXCEL SPREADSHEET IS AVAILABLE THROUGH THE BDC FOR DESIGNERS. IN EARLIER EDITIONS OF THE CODE, THE EQUATIONS WERE INCLUDED IN THE ALLOWABLE STRESS DESIGN AND STRENGTH DESIGN CHAPTERS.

ASSUMPTIONS
1. A MAXIMUM EFFECTIVE DEPTH OF THE NOMINAL WIDTH MINUS 3" WAS USED FOR OFFSET REINFORCEMENT BASED ON ANECDOTAL INFORMATION. IN SOME MARKETS, DEPENDING ON THE FACE SHELL WIDTH, A LARGER EFFECTIVE DEPTH MAY BE POSSIBLE. CONSULT THE BDC OR A LOCAL MASONRY ASSOCIATION FOR MORE INFORMATION.

1 LAP SPLICE LENGTHS (f'm = 2000 psi)

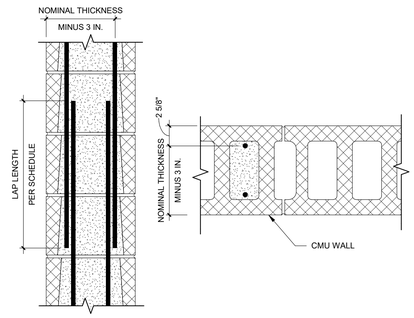
SCALE: 1 1/2" = 1'-0"



LAP SPLICE & DEVELOPMENT LENGTH (IN.)[1,2,3,4], CENTERED BAR						
BAR SIZE	CONCRETE MASONRY NOMINAL THICKNESS					
	6-INCH	8-INCH	10-INCH	12-INCH	14-INCH	16-INCH
#3	12	12	12	12	12	12
#4	16	12	12	12	12	12
#5	25	18	14	12	12	12
#6	47	34	26	21	18	17
#7	-	47	36	29	25	22
#8	-	71	55	45	38	32
#9	-	-	71	57	48	42

NOTES:

1. LENGTHS ARE CALCULATED BASED ON A SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE MASONRY (f'_m) OF 2500 PSI AND A SPECIFIED YIELD STRENGTH OF 60,000 PSI FOR STEEL REINFORCEMENT.
2. DEVELOPMENT AND LAP LENGTH OF EPOXY-COATED BARS SHALL BE TAKEN AS 150 PERCENT OF THE LENGTH SHOWN.
3. MECHANICAL SPLICES SHALL HAVE THE BARS CONNECTED TO DEVELOP AT LEAST 125 PERCENT OF THE SPECIFIED YIELD STRENGTH OF THE BAR.
4. IF THE SPACING BETWEEN ADJACENT SPLICES IS LESS THAN $9d_b$ AND THE MINIMUM MASONRY COVER, STAGGER LAP SPLICES.



LAP SPLICE & DEVELOPMENT LENGTH (IN.)[1,2,3,4], OFFSET BAR						
BAR SIZE	CONCRETE MASONRY NOMINAL THICKNESS					
	6-INCH	8-INCH	10-INCH	12-INCH	14-INCH	16-INCH
#3	-	-	12	12	12	12
#4	-	-	17	17	17	17
#5	-	-	27	27	27	27
#6	-	-	51	51	51	51
#7	-	-	-	71	71	71
#8	-	-	-	-	-	111
#9	-	-	-	-	-	-

NOTES:

1. LENGTHS ARE CALCULATED BASED ON A SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE MASONRY (f'_m) OF 2500 PSI AND A SPECIFIED YIELD STRENGTH OF 60,000 PSI FOR STEEL REINFORCEMENT.
2. DEVELOPMENT AND LAP LENGTH OF EPOXY-COATED BARS SHALL BE TAKEN AS 150 PERCENT OF THE LENGTH SHOWN.
3. MECHANICAL SPLICES SHALL HAVE THE BARS CONNECTED TO DEVELOP AT LEAST 125 PERCENT OF THE SPECIFIED YIELD STRENGTH OF THE BAR.
4. IF THE SPACING BETWEEN ADJACENT SPLICES IS LESS THAN $9d_b$ AND THE MINIMUM MASONRY COVER, STAGGER LAP SPLICES.

DESIGNER NOTES:

CODE REQUIREMENTS
1. REINFORCEMENT BAR SIZE WAS LIMITED TO #9 BASED ON STRENGTH DESIGN PROVISIONS, THOUGH LARGER BAR SIZES ARE POSSIBLE IF ALLOWABLE STRESS DESIGN PROVISIONS ARE USED.
2. CELLS WITH "-" INDICATE LOCATIONS WHERE THE REINFORCEMENT SIZE IS LIMITED BY CELL WIDTH, CLEAR SPACE, AREA OF VERTICAL REINFORCEMENT, OR BAR DIAMETER. REFERNECE TMS 402 SECTION 6.1 FOR ADDITIONAL INFORMATION.

CALCULATIONS
1. LAP SPLICE LENGTHS ARE CALCULATED BASED ON 2016 TMS 402 EQUATION 6-1, AND A REFERENCE EXCEL SPREADSHEET IS AVAILABLE THROUGH THE BDC FOR DESIGNERS. IN EARLIER EDITIONS OF THE CODE, THE EQUATIONS WERE INCLUDED IN THE ALLOWABLE STRESS DESIGN AND STRENGTH DESIGN CHAPTERS.

ASSUMPTIONS
1. A MAXIMUM EFFECTIVE DEPTH OF THE NOMINAL WIDTH MINUS 3" WAS USED FOR OFFSET REINFORCEMENT BASED ON ANECDOTAL INFORMATION. IN SOME MARKETS, DEPENDING ON THE FACE SHELL WIDTH, A LARGER EFFECTIVE DEPTH MAY BE POSSIBLE. CONSULT THE BDC OR A LOCAL MASONRY ASSOCIATION FOR MORE INFORMATION.

2 LAP SPLICE LENGTHS (f'm = 2500 psi)

SCALE: 1 1/2" = 1'-0"

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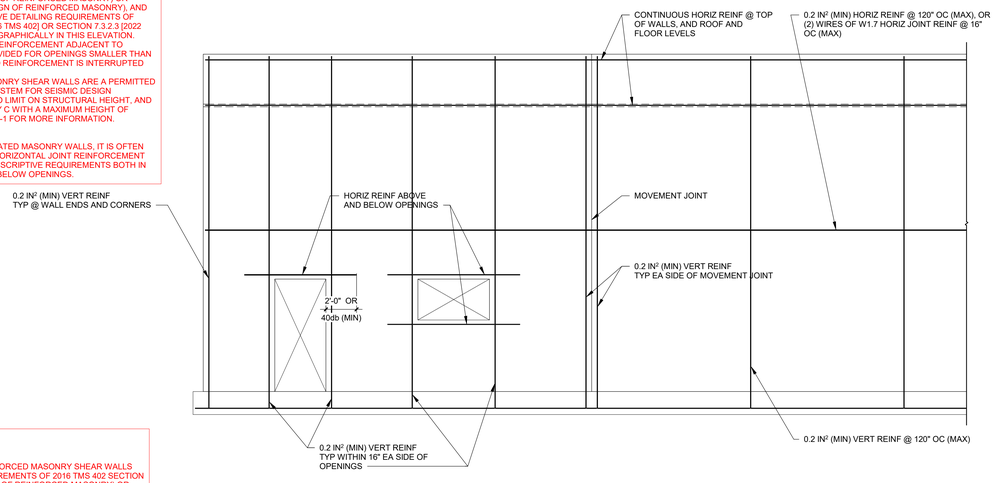
REINFORCEMENT LAP SPLICE LENGTHS

DESIGNER NOTES:

CODE REQUIREMENTS
1. DESIGN OF ORDINARY REINFORCED MASONRY SHEAR WALLS SHALL COMPLY WITH THE REQUIREMENTS OF 2016 TMS 402 SECTION 8.3 (ALLOWABLE STRESS DESIGN OF REINFORCED MASONRY) OR SECTION 9.3 (STRENGTH DESIGN OF REINFORCED MASONRY), AND SHALL MEET THE PRESCRIPTIVE DETAILING REQUIREMENTS OF SECTION 7.3.2.4 [2013 AND 2016 TMS 402] OR SECTION 7.3.2.3 [2022 TMS 402] WHICH ARE SHOWN GRAPHICALLY IN THIS ELEVATION.
2. VERTICAL AND HORIZONTAL REINFORCEMENT ADJACENT TO OPENINGS NEED NOT BE PROVIDED FOR OPENINGS SMALLER THAN 16", UNLESS THE DISTRIBUTED REINFORCEMENT IS INTERRUPTED BY SUCH OPENINGS.
3. ORDINARY REINFORCED MASONRY SHEAR WALLS ARE A PERMITTED SEISMIC FORCE-RESISTING SYSTEM FOR SEISMIC DESIGN CATEGORIES A AND B WITH NO LIMIT ON STRUCTURAL HEIGHT, AND IN SEISMIC DESIGN CATEGORY C WITH A MAXIMUM HEIGHT OF 160'-0". SEE ASCE 7 TABLE 12.2-1 FOR MORE INFORMATION.

DESIGN REQUIREMENTS
1. EXCEPT FOR HIGHLY PERFORATED MASONRY WALLS, IT IS OFTEN MORE ECONOMICAL TO USE HORIZONTAL JOINT REINFORCEMENT TO SATISFY THE MINIMUM PRESCRIPTIVE REQUIREMENTS BOTH IN THE FIELD OF THE WALL AND BELOW OPENINGS.

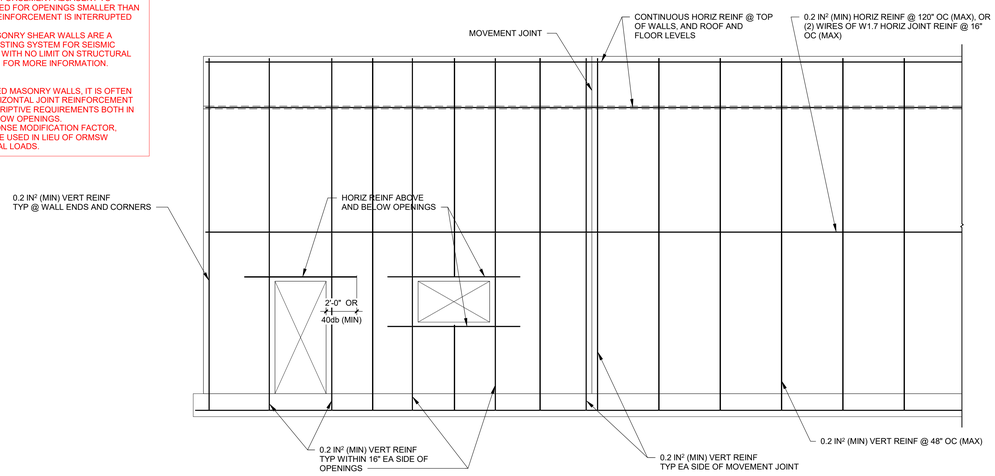


1 TYPICAL ORDINARY REINFORCED MASONRY SHEAR WALL
SCALE: 1/4" = 1'-0"

DESIGNER NOTES:

CODE REQUIREMENTS
1. DESIGN OF INTERMEDIATE REINFORCED MASONRY SHEAR WALLS SHALL COMPLY WITH THE REQUIREMENTS OF 2016 TMS 402 SECTION 8.3 (ALLOWABLE STRESS DESIGN OF REINFORCED MASONRY) OR SECTION 9.3 (STRENGTH DESIGN OF REINFORCED MASONRY), AND SHALL MEET THE PRESCRIPTIVE DETAILING REQUIREMENTS OF SECTION 7.3.2.5 [2013 AND 2016 TMS 402] OR SECTION 7.3.2.5 [2022 TMS 402] WHICH ARE SHOWN GRAPHICALLY IN THIS ELEVATION.
2. VERTICAL AND HORIZONTAL REINFORCEMENT ADJACENT TO OPENINGS NEED NOT BE PROVIDED FOR OPENINGS SMALLER THAN 16", UNLESS THE DISTRIBUTED REINFORCEMENT IS INTERRUPTED BY SUCH OPENINGS.
3. INTERMEDIATE REINFORCED MASONRY SHEAR WALLS ARE A PERMITTED SEISMIC FORCE-RESISTING SYSTEM FOR SEISMIC DESIGN CATEGORIES A, B, AND C WITH NO LIMIT ON STRUCTURAL HEIGHT. SEE ASCE 7 TABLE 12.2-1 FOR MORE INFORMATION.

DESIGN REQUIREMENTS
1. EXCEPT FOR HIGHLY PERFORATED MASONRY WALLS, IT IS OFTEN MORE ECONOMICAL TO USE HORIZONTAL JOINT REINFORCEMENT TO SATISFY THE MINIMUM PRESCRIPTIVE REQUIREMENTS BOTH IN THE FIELD OF THE WALL AND BELOW OPENINGS.
2. BECAUSE OF THE HIGHER RESPONSE MODIFICATION FACTOR, SOMETIMES IRMSW SYSTEMS ARE USED IN LIEU OF ORMSW SYSTEMS DEPENDING ON LATERAL LOADS.



2 TYPICAL INTERMEDIATE REINFORCED MASONRY SHEAR WALL
SCALE: 1/4" = 1'-0"

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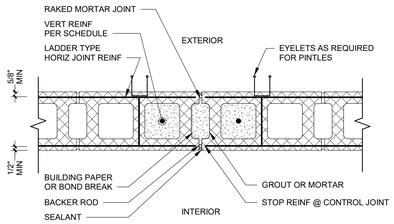
TYPICAL SHEAR WALL ELEVATIONS

DESIGNER NOTES:

CODE REQUIREMENTS
1. TMS 402 REQUIRES THE ARCHITECT/ENGINEER TO INDICATE THE TYPE AND LOCATION OF MOVEMENT JOINTS ON THE PROJECT DRAWINGS. BDC RECOMMENDS THAT JOINTS ARE SHOWN GRAPHICALLY IN THE PLANS OR ELEVATIONS.
2. REFER TO CMHA CMU-TEC-009-25 FOR MORE INFORMATION.
3. CLEAR COVER REQUIREMENTS SHOWN ARE BASED ON TMS 402/602 REQUIREMENTS.

FIRE-RESISTANCE RATINGS
1. THE FORMED PAPER JOINT CAN ACHIEVE A 4-HOUR FIRE RESISTANCE RATING FOR 8-INCH AND LARGER UNITS BASED ON THE EQUIVALENT THICKNESS. SINCE IT IS SOLID FILLED BETWEEN THE "EARS" OF THE STRETCHER UNITS.
2. THE FORMED PAPER CONTROL JOINT PROVIDES A SHEAR KEY BETWEEN ADJACENT WALL PANELS AND CAN FUNCTION TO DISTRIBUTE LATERAL LOADS.

VENEER
1. IF USED FOR CAVITY WALL CONSTRUCTION, STANDARD "HOOK AND EYE" WIRE IS PREFERRED FOR ANCHORING THE VENEER TO THE CMU BACKUP WHERE PINTLES ARE INSERTED INTO THE EYELETS SHOWN.



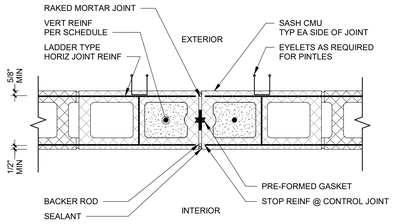
1 FORMED PAPER CONTROL JOINT
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

CODE REQUIREMENTS
1. TMS 402 REQUIRES THE ARCHITECT/ENGINEER TO INDICATE THE TYPE AND LOCATION OF MOVEMENT JOINTS ON THE PROJECT DRAWINGS. BDC RECOMMENDS THAT JOINTS ARE SHOWN GRAPHICALLY IN THE PLANS OR ELEVATIONS.
2. REFER TO CMHA CMU-TEC-009-25 FOR MORE INFORMATION.

FIRE-RESISTANCE RATINGS
1. CONTROL JOINTS THAT USE A PRE-FORMED GASKET CAN ACHIEVE A 2-HOUR FIRE RESISTANCE RATING.

VENEER
1. IF USED FOR CAVITY WALL CONSTRUCTION, STANDARD "HOOK AND EYE" WIRE IS PREFERRED FOR ANCHORING THE VENEER TO THE CMU BACKUP WHERE PINTLES ARE INSERTED INTO THE EYELETS SHOWN.



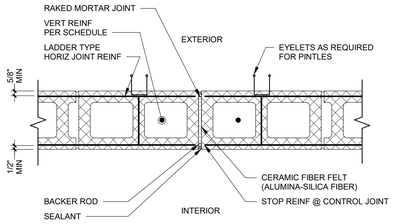
2 GASKETED CONTROL JOINT
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

CODE REQUIREMENTS
1. TMS 402 REQUIRES THE ARCHITECT/ENGINEER TO INDICATE THE TYPE AND LOCATION OF MOVEMENT JOINTS ON THE PROJECT DRAWINGS. BDC RECOMMENDS THAT JOINTS ARE SHOWN GRAPHICALLY IN THE PLANS OR ELEVATIONS.
2. REFER TO CMHA CMU-TEC-009-25 FOR MORE INFORMATION.

FIRE-RESISTANCE RATINGS
1. CONTROL JOINTS THAT USE CERAMIC FIBER FELT (ALUMINA-SILICA FIBER) BETWEEN JAMB UNITS CAN ACHIEVE A 4-HOUR FIRE-RESISTANCE RATING. REFER TO CMHA CMU-TEC-009-25 FOR MORE INFORMATION.

VENEER
1. IF USED FOR CAVITY WALL CONSTRUCTION, STANDARD "HOOK AND EYE" WIRE IS PREFERRED FOR ANCHORING THE VENEER TO THE CMU BACKUP WHERE PINTLES ARE INSERTED INTO THE EYELETS SHOWN.



3 CERAMIC FIBER CONTROL JOINT
SCALE: 1 1/2" = 1'-0"

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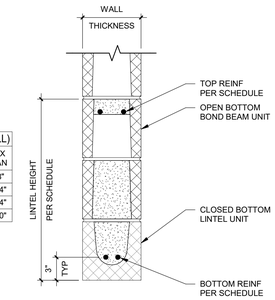
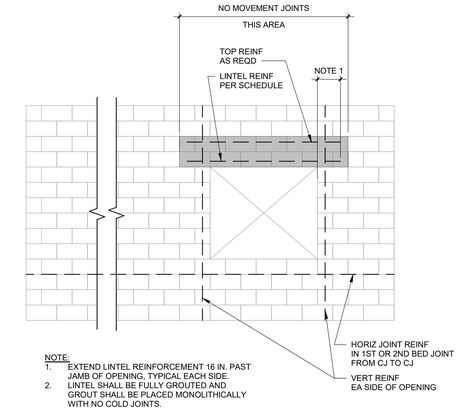
CONTROL JOINT DETAILS

DESIGNER NOTES:

DESIGNER NOTES:
1. LINTEL SPANS BASED ON THE FOLLOWING:
   - A. FACTORED UNIFORM LOAD OF 1,500 LB/FT
   - B. TYPE S MASONRY CEMENT MORTAR
   - C. f'm = 2000 PSI
   - D. NORMAL WEIGHT UNITS (DENSITY = 135 PCF)
   - E. 8" BEARING ON EACH JAMB
2. EVEN IF TOP REINFORCING BARS ARE NOT REQUIRED, IT IS RECOMMENDED TO USE AN OPEN BOTTOM BOND BEAM UNIT TO FACILITATE GROUT FLOW.
3. LINTEL BLOCK SIZES VARY. VERIFY DIMENSIONS WITH BLOCK PRODUCER OR CONTACT BDC FOR MORE INFORMATION.
4. LINTEL SHALL BE FULLY GROUTED. GROUT SHALL BE PLACED MONOLITHICALLY WITH NO COLD JOINTS.
5. GROUT CLEARANCE FROM BAR TO UNIT IS SPECIFIED IN TMS 402-16 SECTION 6.1.3.5 AS THE MINIMUM OF:
   - A. 1/4" - FINE GROUT
   - B. 1/2" - COARSE GROUT
6. MAXIMUM BAR SIZE IS SPECIFIED IN TMS 402-16 AS FOLLOWS:
   - A. #11 (SECTION 6.1.2.1)
   - B. STRENGTH DESIGN - #9 (SECTION 9.3.3.1)
7. VERIFY GROUT CLEARANCE FOR BAR SIZES GREATER THAN #7.
8. CLEAR COVER IS SPECIFIED IN TMS 402-16 SECTION 6.1.4 AS FOLLOWS:
   - A. MASONRY EXPOSED TO EARTH OR WEATHER
     - a. 1 1/2" FOR #5 AND LESS
     - b. 2" FOR GREATER THAN #5
   - B. 1 1/2" FOR MASONRY NOT EXPOSED TO EARTH OR WEATHER
9. FOR STRENGTH DESIGN, TMS 402-16 SECTION 9.3.3.3 REQUIRES THAT BARS SHALL NOT BE BUNDLED.
10. CLEAR DISTANCE BETWEEN BARS IS SPECIFIED IN TMS 402-16 SECTION 6.1.3 AS NOT LESS THAN THE BAR DIAMETER, NOR 1".

MAXIMUM LINTEL SPAN (NON-STRUCTURAL WALL)					
HEIGHT (IN)	WALL THK (IN)	BOTT REINF	TOP REINF	BEARING (IN)	MAX SPAN
8	8/12	(1) #5	-	8	4'-8"
16	8/12	(2) #5	-	8	11'-4"
24	8/12	(2) #5	-	8	15'-4"
32	8/12	(2) #5	-	8	18'-0"





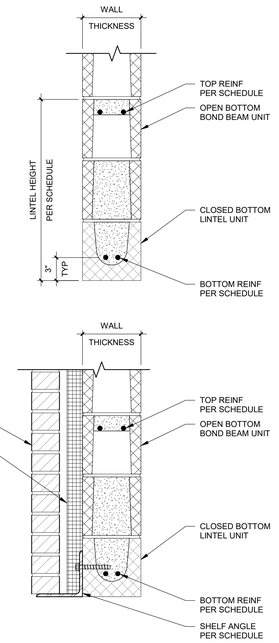
NOTE:
1. EXTEND LINTEL REINFORCEMENT 16 IN. PAST JAMB OF OPENING, TYPICAL EACH SIDE.
2. LINTEL SHALL BE FULLY GROUTED AND GROUT SHALL BE PLACED MONOLITHICALLY WITH NO COLD JOINTS.

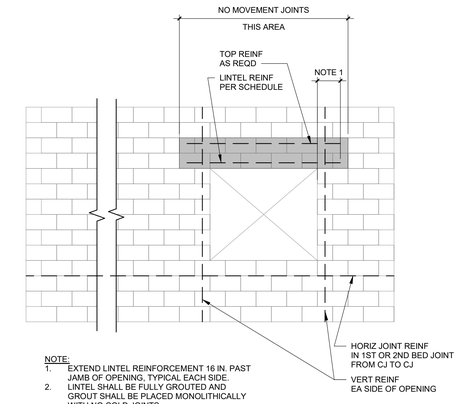
1 TYPICAL CMU LINTEL (NON-LOADBEARING WALL)
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

DESIGNER NOTES:
1. IT IS RECOMMENDED TO SIZE THE LINTEL SUCH THAT THERE IS ADEQUATE MASONRY SHEAR STRENGTH WITHOUT THE NEED FOR SHEAR REINFORCEMENT.
2. EVEN IF TOP REINFORCING BARS ARE NOT REQUIRED, IT IS RECOMMENDED TO USE AN OPEN BOTTOM BOND BEAM UNIT TO FACILITATE GROUT FLOW.
3. LINTEL BLOCK SIZES VARY. VERIFY DIMENSIONS WITH BLOCK PRODUCER OR CONTACT BDC FOR MORE INFORMATION.
4. LINTEL SHALL BE FULLY GROUTED. GROUT SHALL BE PLACED MONOLITHICALLY WITH NO COLD JOINTS.
5. GROUT CLEARANCE FROM BAR TO UNIT IS SPECIFIED IN TMS 402-16 SECTION 6.1.3.5 AS THE MINIMUM OF:
   - A. 1/4" - FINE GROUT
   - B. 1/2" - COARSE GROUT
6. MAXIMUM BAR SIZE IS SPECIFIED IN TMS 402-16 AS FOLLOWS:
   - A. #11 (SECTION 6.1.2.1)
   - B. STRENGTH DESIGN - #9 (SECTION 9.3.3.1)
7. VERIFY GROUT CLEARANCE FOR BAR SIZES GREATER THAN #7.
8. CLEAR COVER IS SPECIFIED IN TMS 402-16 SECTION 6.1.4 AS FOLLOWS:
   - A. MASONRY EXPOSED TO EARTH OR WEATHER
     - a. 1 1/2" FOR #5 AND LESS
     - b. 2" FOR GREATER THAN #5
   - B. 1 1/2" FOR MASONRY NOT EXPOSED TO EARTH OR WEATHER
9. FOR STRENGTH DESIGN, TMS 402-16 SECTION 9.3.3.3 REQUIRES THAT BARS SHALL NOT BE BUNDLED.
10. CLEAR DISTANCE BETWEEN BARS IS SPECIFIED IN TMS 402-16 SECTION 6.1.3 AS NOT LESS THAN THE BAR DIAMETER, NOR 1".
11. LINTEL SCHEDULE IS SHOWN FOR REFERENCE ONLY, AND LINTEL REINFORCEMENT WOULD NEED TO BE CALCULATED BASED ON APPLICABLE DESIGN LOADS.

LINTEL SCHEDULE						
MARK	HEIGHT (IN)	WALL THK (IN)	BOTT REINF	TOP REINF	BEARING (IN)	COMMENTS
L1	8	8	(1) #5	-	8	
L2	16	8	(2) #5	(2) #5	8	
L3	8	12	(2) #5	(2) #5	8	
L4	16	12	(2) #5	(2) #5	8	L6X6X3/8 GALV SHELF ANGLE W/ 5/8" Ø HILTI KWIK BOLT TZ @ 24" OC, MIN 4-5/8" EMBED





NOTE:
1. EXTEND LINTEL REINFORCEMENT 16 IN. PAST JAMB OF OPENING, TYPICAL EACH SIDE.
2. LINTEL SHALL BE FULLY GROUTED AND GROUT SHALL BE PLACED MONOLITHICALLY WITH NO COLD JOINTS.

2 TYPICAL CMU LINTEL
SCALE: 1 1/2" = 1'-0"

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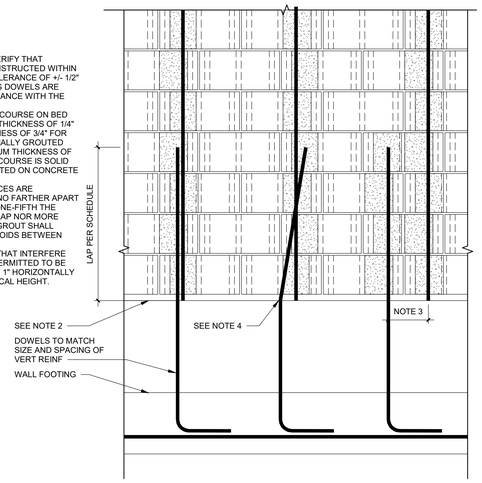
LINTEL DETAILS

NOTES:

1. CONTRACTOR SHALL VERIFY THAT FOUNDATIONS ARE CONSTRUCTED WITHIN A LEVEL ALIGNMENT TOLERANCE OF +\- 1/2" AND THAT REINFORCING DOWELS ARE POSITIONED IN ACCORDANCE WITH THE PROJECT DRAWINGS.
2. CONSTRUCT STARTING COURSE ON BED JOINT WITH A MINIMUM THICKNESS OF 1/4" AND A MAXIMUM THICKNESS OF 3/4" FOR UNGROUTED AND PARTIALLY GROUTED MASONRY, OR A MAXIMUM THICKNESS OF 1-1/4" WHEN THE FIRST COURSE IS SOLID GROUTED AND SUPPORTED ON CONCRETE FOUNDATION.
3. NONCONTACT LAP SPLICES ARE PERMITTED IF SPACED NO FARTHER APART TRANSVERSELY THAN ONE-FIFTH THE SPECIFIED LENGTH OF LAP NOR MORE THAN 8". IN THIS CASE, GROUT SHALL COMPLETELY FILL ALL VOIDS BETWEEN BARS.
4. FOUNDATION DOWELS THAT INTERFERE WITH UNIT WEBS ARE PERMITTED TO BE BENT TO A MAXIMUM OF 1" HORIZONTALLY FOR EVERY 6" OF VERTICAL HEIGHT.



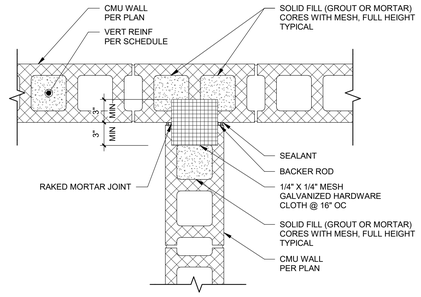
7 TYPICAL FOUNDATION DOWEL
SCALE: 1" = 1'-0"

DESIGNER NOTES:

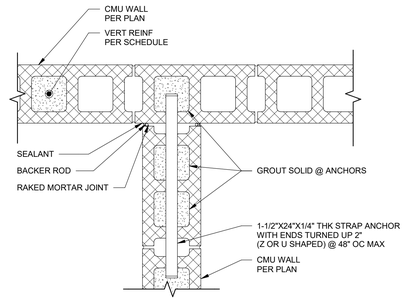
CODE REQUIREMENTS
1. 2016 TMS 402 SECTION 5.1.1 PROVIDES VARIOUS METHODS FOR THE DESIGN OF WALL INTERSECTIONS. THIS CODE LANGUAGE WAS CHANGED IN THE 2022 TMS 402 TO INCLUDE A THIRD OPTION FOR LATERAL SUPPORTS FOR WALLS WITHOUT COMPOSITE ACTION AT THE INTERSECTIONS. THIS DETAIL IS DEVELOPED TO ANCHOR THE INTERSECTING WALL TO TRANSFER NO FORCES OTHER THAN OUT-OF-PLANE LOADS TO THE SUPPORTING WALL.
2. THIS DETAIL IS RECOMMENDED TO BE USED IN LIEU OF A STRAP ANCHOR DETAIL UNLESS COMPOSITE ACTON IS SPECIFICALLY DESIGNED.

DESIGNER NOTES:

CODE REQUIREMENTS
1. THE STEEL CONNECTOR SHOWN IS FOR A FLANGED SHEAR WALL, AS DESIGNED IN ACCORDANCE WITH 2016 TMS 402 SECTION 5.1.1.2.
2. IF THE WALL INTERSECTION IS NOT DESIGNED FOR FLANGED BEHAVIOR, THIS DETAIL SHOULD NOT BE USED.



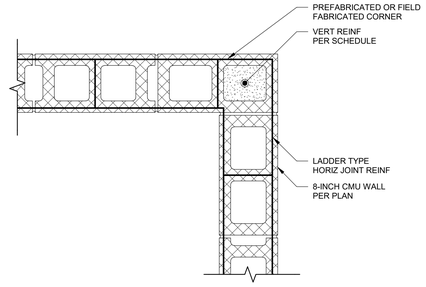
5 NONCOMPOSITE WALL INTERSECTION
SCALE: 1 1/2" = 1'-0"

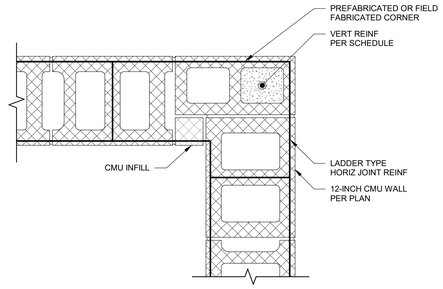


6 FLANGED WALL INTERSECTION
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

CODE REQUIREMENTS
1. TMS 402 SECTION 6.1.4.2 REQUIRES JOINT REINFORCEMENT TO BE PROTECTED FROM CORROSION BY HOT-DIPPED GALVANIZED COATING OR EPOXY COATING WHEN USED IN MASONRY EXPOSED TO HEAT OR WEATHER AND INTERIOR WALLS EXPOSED TO A MEAN RELATIVE HUMIDITY EXCEEDING 75 PERCENT, OR STAINLESS STEEL JOINT REINFORCEMENT MAY BE USED. ALL OTHER JOINT REINFORCEMENT SHALL BE MILL GALVANIZED, HOT-DIP GALVANIZED, OR STAINLESS STEEL.
2. TMS 602 ARTICLE 3.4.B.10 REQUIRES A MINIMUM 6" [8"] LAP SPLICE FOR JOINT REINFORCEMENT.
3. JOINT REINFORCEMENT TO BE CONTINUOUS AROUND CORNERS USING EITHER PREFABRICATED CORNERS OR AN ESTABLISHED FIELD FABRICATED PROCEDURE.

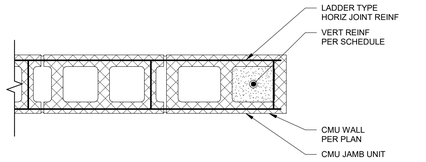




1 CORNER DETAILS
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

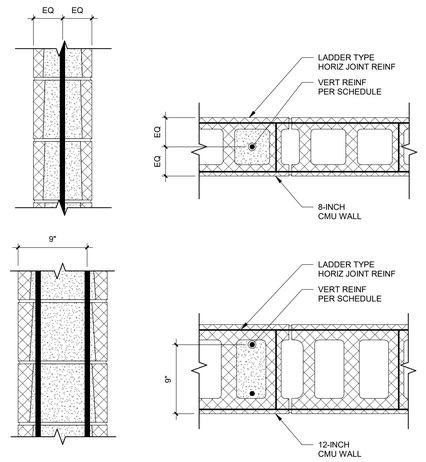
CODE REQUIREMENTS
1. TMS 402 REQUIRES VERTICAL REINFORCEMENT AT THE ENDS OF WALLS FOR PARTICPATING WALLS IN CHAPTER 7. WHILE NOT SPECIFICALLY REQUIRED FOR NON-PARTICIPATING ELEMENTS, IT IS GENERALLY GOOD PRACTICE TO PROVIDE A VERTICAL REINFORCEMENT BAR AT THE END OF A WALL.



2 END DETAIL
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

DESIGN REQUIREMENTS
1. FOR 8-INCH CMU WALLS IN SEISMIC DESIGN CATEGORIES A, B, AND C, IT IS COMMON TO USE PARTIALLY GROUTED CONSTRUCTION WITH CENTERED REINFORCEMENT.
2. FOR 12-INCH CMU WALLS IN SEISMIC DESIGN CATEGORIES A, B, AND C, IT IS COMMON TO USE PARTIALLY GROUTED CONSTRUCTION WITH OFFSET REINFORCEMENT. THESE DETAILS SHOW AN EFFECTIVE DEPTH OF THE NOMINAL WIDTH MINUS 3", SO 5" FOR A 12-INCH CMU BASED ON ANECDOTAL EVIDENCE. A LARGER VALUE FOR THE EFFECTIVE DEPTH MAY BE POSSIBLE, AND DESIGNERS SHOULD CONSULT THE BDC FOR MORE INFORMATION.

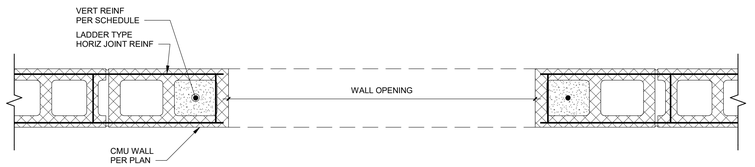


3 TYPICAL VERTICAL REINFORCEMENT
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

CODE REQUIREMENTS
1. TMS 402 REQUIRES REINFORCEMENT ON EACH SIDE OF OPENINGS FOR PARTICIPATING ELEMENTS INCLUDING ORMSW AND IRMSW SYSTEMS. ALTHOUGH NOT SPECIFICALLY REQUIRED FOR NON-PARTICIPATING ELEMENTS, IT IS GENERALLY GOOD DESIGN PRACTICE TO PROVIDE VERTICAL REINFORCEMETN ON EACH SIDE OF OPENINGS.

DESIGN REQUIREMENTS
1. DEPENDING ON THE OPENING WIDTH, TWO VERTICAL REINFORCEMENT BARS MAY BE REQUIRED AT EACH JAMB.
2. WHEN USED IN COMBINATION WITH MASONRY LINTELS, VERTICAL REINFORCEMENT CAN BE INSTALLED IN THE FIRST CELL ON EACH SIDE OF OPENINGS. WHEN USING STEEL BEAMS OR PRECAST BEAMS TO SUPPORT MASONRY OVER OPENINGS, THE VERTICAL JAMB REINFORCEMENT MAY NEED TO BE OFFSET TO AN ADJACENT CORE.



4 TYPICAL JAMB DETAIL
SCALE: 1 1/2" = 1'-0"

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MISC. STRUCTURAL DETAILS

008

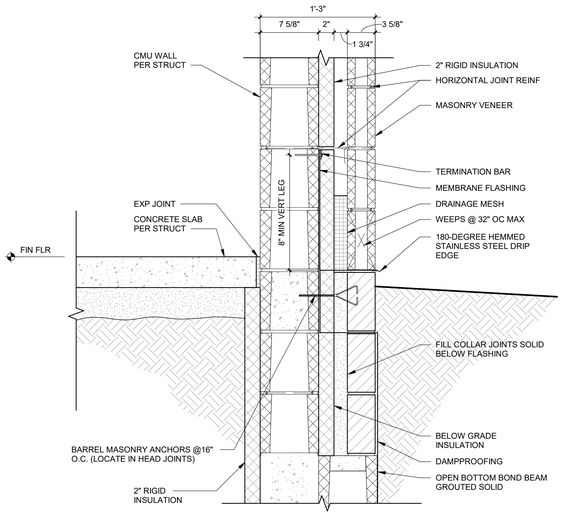
DESIGNER NOTES:

JOINT REINFORCEMENT
1. RECOMMEND USING LADDER TYPE JOINT REINFORCEMENT IN LIEU OF TRUSS TYPE JOINT REINFORCEMENT TO AVOID CONFLICTS WITH VERTICAL REINFORCEMENT.
2. SPACING OF HORIZONTAL JOINT REINFORCEMENT SHALL BE DETERMINED IN ACCORDANCE WITH CMHA TECHNICAL NOTE 009. SPACING IS TYPICALLY 16" ON CENTER FOR 8 IN. NOMINAL HEIGHT UNITS AND 12" ON CENTER FOR 4 IN. NOMINAL HEIGHT UNITS.
3. RECOMMEND USING STANDARD "HOOK AND EYE" TYPE JOINT REINFORCEMENT TO ANCHOR VENEER UNITS.
4. PROVIDE TWO WIRES OF 9 GA. JOINT REINFORCEMENT AT 16" ON CENTER PER CMHA TECHNICAL NOTE 009.

FLASHING/WEEPS:
1. CAVITY INSULATION SHALL BE NOTCHED AROUND TERMINATION BAR.
2. IF JOINTS BETWEEN RIGID INSULATION ARE SEALED IN, THE SYSTEM CAN QUALIFY AS AN AIR BARRIER.
3. RECOMMEND SPECIFYING DRAINAGE MESH MATERIAL, WHICH IS GENERALL 10" IN HEIGHT, ABOVE FLASHING.
4. RECOMMEND MINIMUM 8" VERTICAL LEG ON FLASHING WHEN NOT IN DIRECT CONTACT WITH DRAINAGE MESH. IF IN DIRECT CONTACT, CONSIDER A LONGER VERTICAL LEG EXTENSION.
5. RECOMMEND EITHER TERMINATING MEMBRANE FLASHING FLUSH WITH MASONRY VENEER OR INSTALLING 180-DEGREE HEMMED DRIP EDGE FLUSH WITH FACE OF WALL TO AVOID SHARP CORNERS AND HAZARDS AT BASE CONDITION ONLY.
6. TMS 402 REQUIRES A MINIMUM 1" AIR SPACE, THOUGH A 2" AIR SPACE IS OFTEN RECOMMENDED. ARCHITECT REQUIRED TO ADJUST WALL THICKNESS BASED ON PROJECT NEEDS.

MORTAR JOINTS
1. RECOMMEND SPECIFYING TO TOOL EXTERIOR MORTAR JOINTS TO A CONCAVE PROFILE.
2. RECOMMEND SPECIFYING TO STRIKE THE MORTAR JOINTS FLUSH ON THE OUTER FACE OF CMU WALL FOR CAVITY WALL CONSTRUCTION.
3. RECOMMEND SPECIFYING TYPE S MORTAR FOR CMU BACKUP WALL AND TYPE N MORTAR FOR MASONRY VENEER. CEMENT TYPE (MASONRY CEMENT, MORTAR CEMENT, OR PORTLAND CEMENT/LIME) IS REGIONAL AND BEST LEFT TO THE MASON CONTRACTOR IN SESIMIC DESIGN CATEGORIES A, B, AND C.

ENERGY CODE
1. CONTACT BDC FOR ADDITIONAL INFORMATION ON HOW INSULATION CAN BE ADDED TO MEET ENERGY CODE REQUIREMENTS.



3 ARCH BASE DETAIL (CMU VENEER)
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

JOINT REINFORCEMENT
1. RECOMMEND USING LADDER TYPE JOINT REINFORCEMENT IN LIEU OF TRUSS TYPE JOINT REINFORCEMENT TO AVOID CONFLICTS WITH VERTICAL REINFORCEMENT.
2. SPACING OF HORIZONTAL JOINT REINFORCEMENT SHALL BE DETERMINED IN ACCORDANCE WITH CMHA TECHNICAL NOTE 009. SPACING IS TYPICALLY 16" ON CENTER FOR 8 IN. NOMINAL HEIGHT UNITS AND 12" ON CENTER FOR 4 IN. NOMINAL HEIGHT UNITS.
3. RECOMMEND USING STANDARD "HOOK AND EYE" TYPE JOINT REINFORCEMENT TO ANCHOR VENEER UNITS.
4. PROVIDE TWO WIRES OF 9 GA. JOINT REINFORCEMENT AT 16" ON CENTER PER CMHA TECHNICAL NOTE 009.

FLASHING/WEEPS:
1. CAVITY INSULATION SHALL BE NOTCHED AROUND TERMINATION BAR.
2. IF JOINTS BETWEEN RIGID INSULATION ARE SEALED IN, THE SYSTEM CAN QUALIFY AS AN AIR BARRIER.
3. RECOMMEND SPECIFYING DRAINAGE MESH MATERIAL, WHICH IS GENERALL 10" IN HEIGHT, ABOVE FLASHING.
4. RECOMMEND MINIMUM 8" VERTICAL LEG ON FLASHING WHEN NOT IN DIRECT CONTACT WITH DRAINAGE MESH. IF IN DIRECT CONTACT, CONSIDER A LONGER VERTICAL LEG EXTENSION.
5. RECOMMEND EITHER TERMINATING MEMBRANE FLASHING FLUSH WITH MASONRY VENEER OR INSTALLING 180-DEGREE HEMMED DRIP EDGE FLUSH WITH FACE OF WALL TO AVOID SHARP CORNERS AND HAZARDS AT BASE CONDITION ONLY.
6. TMS 402 REQUIRES A MINIMUM 1" AIR SPACE, THOUGH A 2" AIR SPACE IS OFTEN RECOMMENDED. ARCHITECT REQUIRED TO ADJUST WALL THICKNESS BASED ON PROJECT NEEDS.

MORTAR JOINTS
1. RECOMMEND SPECIFYING TO TOOL EXTERIOR MORTAR JOINTS TO A CONCAVE PROFILE.
2. RECOMMEND SPECIFYING TO STRIKE THE MORTAR JOINTS FLUSH ON THE OUTER FACE OF CMU WALL FOR CAVITY WALL CONSTRUCTION.
3. RECOMMEND SPECIFYING TYPE S MORTAR FOR CMU BACKUP WALL AND TYPE N MORTAR FOR MASONRY VENEER. CEMENT TYPE (MASONRY CEMENT, MORTAR CEMENT, OR PORTLAND CEMENT/LIME) IS REGIONAL AND BEST LEFT TO THE MASON CONTRACTOR IN SESIMIC DESIGN CATEGORIES A, B, AND C.

ENERGY CODE
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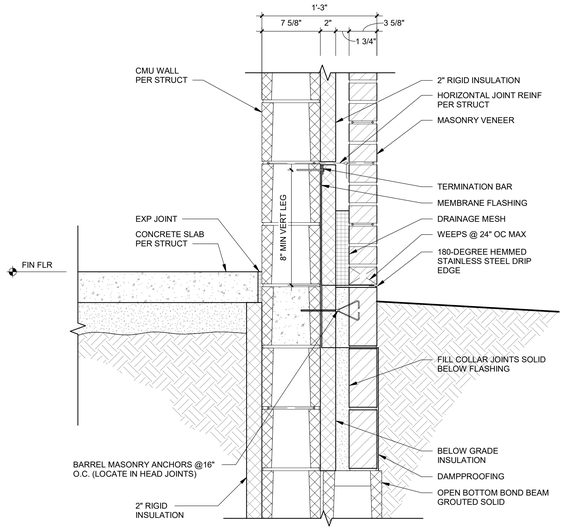


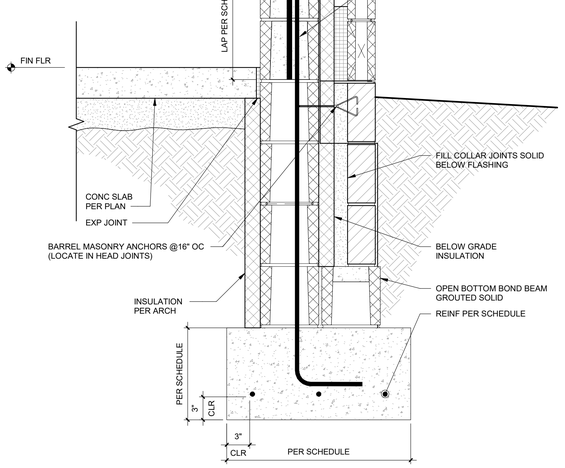
1 ARCH BASE DETAIL (CONC BRICK)
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

JOINT REINFORCEMENT
1. RECOMMEND USING LADDER TYPE JOINT REINFORCEMENT IN LIEU OF TRUSS TYPE JOINT REINFORCEMENT TO AVOID CONFLICTS WITH VERTICAL REINFORCEMENT.
2. SPACING OF HORIZONTAL JOINT REINFORCEMENT SHALL BE DETERMINED IN ACCORDANCE WITH CMHA TECHNICAL NOTE 009. SPACING IS TYPICALLY 16" ON CENTER FOR 8 IN. NOMINAL HEIGHT UNITS AND 12" ON CENTER FOR 4 IN. NOMINAL HEIGHT UNITS.
3. RECOMMEND USING STANDARD "HOOK AND EYE" TYPE JOINT REINFORCEMENT TO ANCHOR VENEER UNITS.
4. PROVIDE TWO WIRES OF 9 GA. JOINT REINFORCEMENT AT 16" ON CENTER PER CMHA TECHNICAL NOTE 009.

MORTAR JOINTS
1. RECOMMEND SPECIFYING TO TOOL EXTERIOR MORTAR JOINTS TO A CONCAVE PROFILE.
2. RECOMMEND SPECIFYING TO STRIKE THE MORTAR JOINTS FLUSH ON THE OUTER FACE OF CMU WALL FOR CAVITY WALL CONSTRUCTION.
3. RECOMMEND SPECIFYING TYPE S MORTAR FOR CMU BACKUP WALL AND TYPE N MORTAR FOR MASONRY VENEER. CEMENT TYPE (MASONRY CEMENT, MORTAR CEMENT, OR PORTLAND CEMENT/LIME) IS REGIONAL AND BEST LEFT TO THE MASON CONTRACTOR IN SESIMIC DESIGN CATEGORIES A, B, AND C.
4. IF CONCRETE BRICK VENEER IS LAID IN OTHER THAN RUNNING BOND, PROVIDE TWO WIRES OF 9 GA. JOINT REINFORCEMENT AT 12" ON CENTER PER CMHA TECHNICAL NOTE 009.

REINFORCEMENT
1. MINIMUM LAP SPLICE SHALL BE CALCULATED IN ACCORDANCE WITH TMS 402 PROVISIONS. CONTRACTOR MAY ELECT TO INCREASE LAP SPLICE LENGTH FOR "INTERNAL" WALL BRACING IN ACCORDANCE WITH MCAA STANDARD PRACTICE FOR BRACING MASONRY WALLS UNDER CONSTRUCTION.



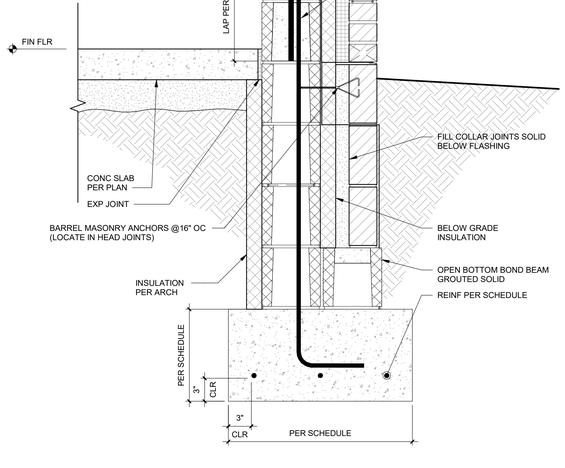
4 STRUCT BASE DETAIL (CMU VENEER)
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

JOINT REINFORCEMENT
1. RECOMMEND USING LADDER TYPE JOINT REINFORCEMENT IN LIEU OF TRUSS TYPE JOINT REINFORCEMENT TO AVOID CONFLICTS WITH VERTICAL REINFORCEMENT.
2. SPACING OF HORIZONTAL JOINT REINFORCEMENT SHALL BE DETERMINED IN ACCORDANCE WITH CMHA TECHNICAL NOTE 009. SPACING IS TYPICALLY 16" ON CENTER FOR 8 IN. NOMINAL HEIGHT UNITS AND 12" ON CENTER FOR 4 IN. NOMINAL HEIGHT UNITS.
3. RECOMMEND USING STANDARD "HOOK AND EYE" TYPE JOINT REINFORCEMENT TO ANCHOR VENEER UNITS.
4. IF CONCRETE BRICK VENEER IS LAID IN OTHER THAN RUNNING BOND, PROVIDE TWO WIRES OF 9 GA. JOINT REINFORCEMENT AT 12" ON CENTER PER CMHA TECHNICAL NOTE 009.

MORTAR JOINTS
1. RECOMMEND SPECIFYING TO TOOL EXTERIOR MORTAR JOINTS TO A CONCAVE PROFILE.
2. RECOMMEND SPECIFYING TO STRIKE THE MORTAR JOINTS FLUSH ON THE OUTER FACE OF CMU WALL FOR CAVITY WALL CONSTRUCTION.
3. RECOMMEND SPECIFYING TYPE S MORTAR FOR CMU BACKUP WALL AND TYPE N MORTAR FOR MASONRY VENEER. CEMENT TYPE (MASONRY CEMENT, MORTAR CEMENT, OR PORTLAND CEMENT/LIME) IS REGIONAL AND BEST LEFT TO THE MASON CONTRACTOR IN SESIMIC DESIGN CATEGORIES A, B, AND C.

REINFORCEMENT
1. MINIMUM LAP SPLICE SHALL BE CALCULATED IN ACCORDANCE WITH TMS 402 PROVISIONS. CONTRACTOR MAY ELECT TO INCREASE LAP SPLICE LENGTH FOR "INTERNAL" WALL BRACING IN ACCORDANCE WITH MCAA STANDARD PRACTICE FOR BRACING MASONRY WALLS UNDER CONSTRUCTION.



2 STRUCT BASE DETAIL (CONC BRICK)
SCALE: 1 1/2" = 1'-0"

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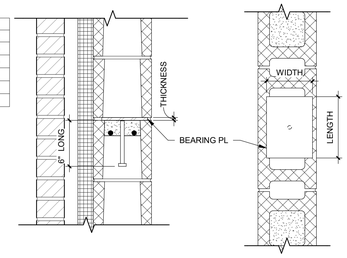
BASE DETAILS

MARK	LENGTH (IN.)	WIDTH (IN.)	THICKNESS (IN.)	HEADED STUDS	FACTORED STRENGTH		
					BEARING	UPLIFT	SHEAR
BP1	8	6	3/8	(1) 1/2" Ø	60.5 k	4,600 lb	2,760 lb
BP2	12	6-1/2	3/8	(2) 1/2" Ø	93.6 k	9,200 lb	5,520 lb
BP3							
BP4							
BPX							

DESIGNER NOTES:

CODE REQUIREMENTS
1. FACTORED BEARING STRENGTH HAS BEEN CALCULATED BASED ON TMS 402 SECTION 9.1.8 AND A STRENGTH REDUCTION FACTOR OF 0.60 AS REQUIRED BY SECTION 9.1.4.2.
2. FACTORED UPLIFT AND SHEAR STRENGTH VALUES ARE BASED ON TABLES DEVELOPED IN "STRENGTH DESIGN OF MASONRY" AND PUBLISHED BY TMS (2020).

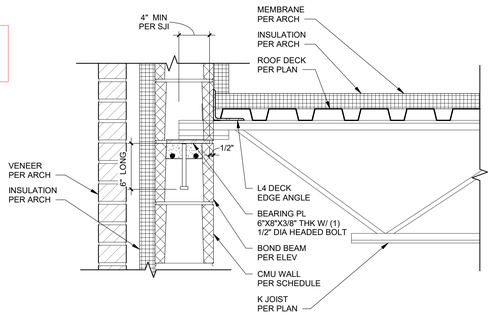


SECTION PLAN

1 BEARING PLATE SCHEDULE
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

CODE REQUIREMENTS
1. ENGINEER CAN REQUEST LESS THAN 4" BEARING LENGTH, 4" MINIMUM IS SHOWN BASED ON SJI REQUIREMENTS.



2 TYPICAL JOIST BEARING
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

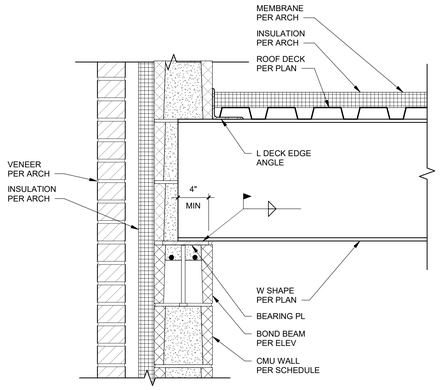
CODE REQUIREMENTS
1. ENGINEER CAN REQUEST LESS THAN 4" BEARING LENGTH, 4" MINIMUM IS SHOWN BASED ON SJI REQUIREMENTS.
2. TMS 402 SECTION 5.2.1.3 REQUIRES A MINIMUM BEARING LENGTH OF 4". DESIGNER CAN OFFSET JOISTS TO KEEP MINIMUM 4" BEARING LENGTH RECOMMENDED BY SJI, OR REQUEST A SMALLER BEARING LENGTH FROM THE JOIST MANUFACTURER.

3 TYPICAL JOIST BEARING
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

CODE REQUIREMENTS
1. SEE BEARING PLATE DETAIL FOR CAPACITY OF PLATE SHOWN.

DESIGN REQUIREMENTS
1. BOND BEAM IS SHOWN GRAPHICALLY AND SHOULD BE LOCATED BELOW THE BEARING ELEVATION SUCH THAT THE HEADED STUDS ENGAGE THE BOND BEAM COURSE.
2. STEPPED BOND BEAMS SHOULD BE CONSIDERED FOR SLOPED ROOF CONDITIONS.
3. CONSIDERATION SHOULD BE GIVEN FOR DIFFERENTIAL MOVEMENT DUE TO THE DIFFERENT THERMAL COEFFICIENTS FOR STEEL AND MASONRY SINCE THE W SHAPE IS WELDED TO THE BEARING PLATE, ESPECIALLY AT AREAS WITH HIGH STIFFNESS (CORNERS, WALL INTERSECTIONS, ETC.)

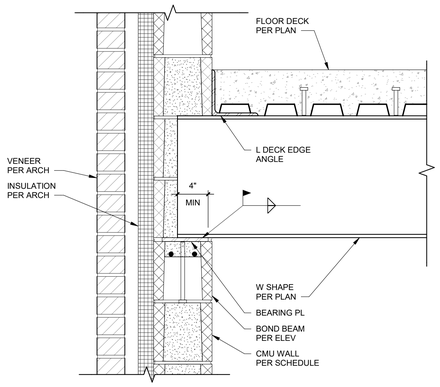


4 TYPICAL BEAM BEARING
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

CODE REQUIREMENTS
1. SEE BEARING PLATE DETAIL FOR CAPACITY OF PLATE SHOWN.

DESIGN REQUIREMENTS
1. BOND BEAM IS SHOWN GRAPHICALLY AND SHOULD BE LOCATED BELOW THE BEARING ELEVATION SUCH THAT THE HEADED STUDS ENGAGE THE BOND BEAM COURSE.
2. STEPPED BOND BEAMS SHOULD BE CONSIDERED FOR SLOPED ROOF CONDITIONS.
3. CONSIDERATION SHOULD BE GIVEN FOR DIFFERENTIAL MOVEMENT DUE TO THE DIFFERENT THERMAL COEFFICIENTS FOR STEEL AND MASONRY SINCE THE W SHAPE IS WELDED TO THE BEARING PLATE, ESPECIALLY AT AREAS WITH HIGH STIFFNESS (CORNERS, WALL INTERSECTIONS, ETC.)

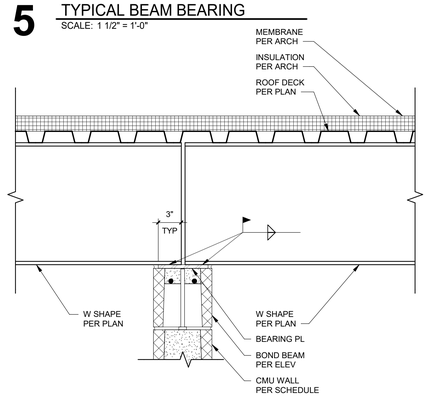


5 TYPICAL BEAM BEARING
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

CODE REQUIREMENTS
1. SEE BEARING PLATE DETAIL FOR CAPACITY OF PLATE SHOWN.
2. CHECK CONCENTRATED LOAD PROVISIONS FROM AISC 360 TO ENSURE THAT WEB STIFFENERS ARE NOT REQUIRED BASED ON BEAM REACTION.
3. THIS DETAIL CREATES A POSITIVE CONNECTION FROM THE DIAPHRAGM TO THE MASONRY WALL AND, AS SUCH, THE MASONRY WALL WILL BE A PARTICIPATING WALL FOR THE LATERAL-FORCE-RESISTING SYSTEM.

DESIGN REQUIREMENTS
1. BOND BEAM IS SHOWN GRAPHICALLY AND SHOULD BE LOCATED BELOW THE BEARING ELEVATION SUCH THAT THE HEADED STUDS ENGAGE THE BOND BEAM COURSE.
2. CONSIDERATION SHOULD BE GIVEN FOR DIFFERENTIAL MOVEMENT DUE TO THE DIFFERENT THERMAL COEFFICIENTS FOR STEEL AND MASONRY SINCE THE W SHAPE IS WELDED TO THE BEARING PLATE, ESPECIALLY AT AREAS WITH HIGH STIFFNESS (CORNERS, WALL INTERSECTIONS, ETC.)

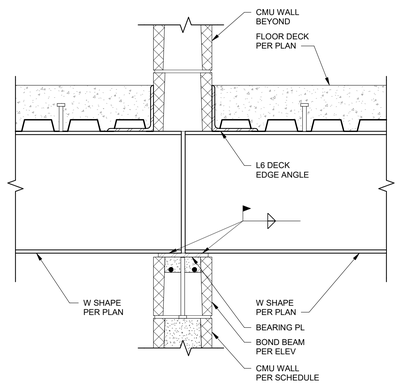


6 TYPICAL BEAM BEARING
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

CODE REQUIREMENTS
1. SEE BEARING PLATE DETAIL FOR CAPACITY OF PLATE SHOWN.
2. CHECK CONCENTRATED LOAD PROVISIONS FROM AISC 360 TO ENSURE THAT WEB STIFFENERS ARE NOT REQUIRED BASED ON BEAM REACTION.
3. THIS DETAIL CREATES A POSITIVE CONNECTION FROM THE DIAPHRAGM TO THE MASONRY WALL AND, AS SUCH, THE MASONRY WALL WILL BE A PARTICIPATING WALL FOR THE LATERAL-FORCE-RESISTING SYSTEM.

DESIGN REQUIREMENTS
1. BOND BEAM IS SHOWN GRAPHICALLY AND SHOULD BE LOCATED BELOW THE BEARING ELEVATION SUCH THAT THE HEADED STUDS ENGAGE THE BOND BEAM COURSE.
2. CONSIDERATION SHOULD BE GIVEN FOR DIFFERENTIAL MOVEMENT DUE TO THE DIFFERENT THERMAL COEFFICIENTS FOR STEEL AND MASONRY SINCE THE W SHAPE IS WELDED TO THE BEARING PLATE, ESPECIALLY AT AREAS WITH HIGH STIFFNESS (CORNERS, WALL INTERSECTIONS, ETC.)



7 TYPICAL BEAM BEARING
SCALE: 1 1/2" = 1'-0"

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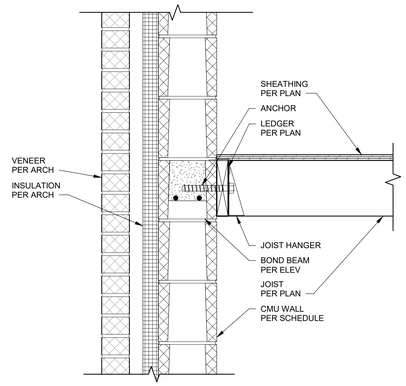
STEEL BEARING DETAILS

DESIGNER NOTES:

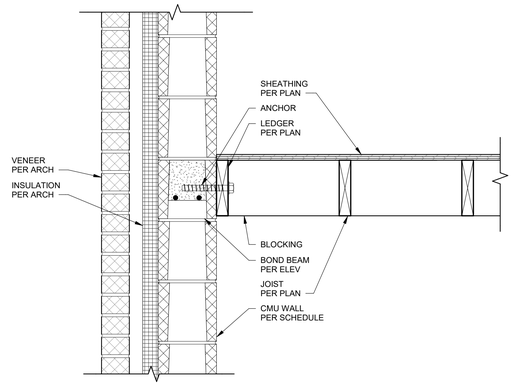
DESIGN REQUIREMENTS
1. BOND BEAM IS SHOWN GRAPHICALLY AND SHOULD BE LOCATED BELOW THE BEARING ELEVATION SUCH THAT THE LEDGER ANCHORS ARE FULLY EMBEDDED IN GROUT.
2. LEDGER SHOULD BE PRESSURE TREATED OR HAVE A MOISTURE BARRIER IN THE DESIGN.
3. ANCHORS CAN EIITHER BE CAST-IN-PLACE AND DESIGNED WITH THE TMS 402 ANCHOR PROVISIONS WHICH WILL TYPICALLY RESULT IN ADDED CAPACITY, OR POST INSTALLED ANCHORS MAY BE USED.
4. BECAUSE OF THE POSITIVE CONNNECTION FROM THE DIAPHGRAM TO THE MASONRY WALL, THE MASONRY WILL RESIST LATERAL LOAD AND BE PART OF THE LATERAL FORCE-RESISITNG SYSTEM.



1 TYPICAL JOIST BEARING
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

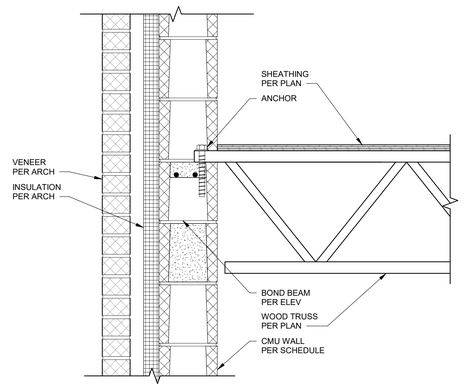
DESIGN REQUIREMENTS
1. BOND BEAM IS SHOWN GRAPHICALLY AND SHOULD BE LOCATED BELOW THE BEARING ELEVATION SUCH THAT THE LEDGER ANCHORS ARE FULLY EMBEDDED IN GROUT.
2. LEDGER SHOULD BE PRESSURE TREATED OR HAVE A MOISTURE BARRIER IN THE DESIGN.
3. ANCHORS CAN EIITHER BE CAST-IN-PLACE AND DESIGNED WITH THE TMS 402 ANCHOR PROVISIONS WHICH WILL TYPICALLY RESULT IN ADDED CAPACITY, OR POST INSTALLED ANCHORS MAY BE USED.
4. BECAUSE OF THE POSITIVE CONNNECTION FROM THE DIAPHGRAM TO THE MASONRY WALL, THE MASONRY WILL RESIST LATERAL LOAD AND BE PART OF THE LATERAL FORCE-RESISITNG SYSTEM.



2 TYPICAL SECTION
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

DESIGN REQUIREMENTS
1. BOND BEAM IS SHOWN GRAPHICALLY AND SHOULD BE LOCATED BELOW THE BEARING ELEVATION SUCH THAT THE FLOOR TRUSS ANCHORS ARE FULLY EMBEDDED IN GROUT.
2. ANCHORS CAN EIITHER BE CAST-IN-PLACE AND DESIGNED WITH THE TMS 402 ANCHOR PROVISIONS WHICH WILL TYPICALLY RESULT IN ADDED CAPACITY, OR POST INSTALLED ANCHORS MAY BE USED.
3. BECAUSE OF THE POSITIVE CONNNECTION FROM THE DIAPHGRAM TO THE MASONRY WALL, THE MASONRY WILL WILL RESIST LATERAL LOAD AND BE PART OF THE LATERAL FORCE-RESISITNG SYSTEM.



3 TYPICAL TRUSS BEARING
SCALE: 1 1/2" = 1'-0"

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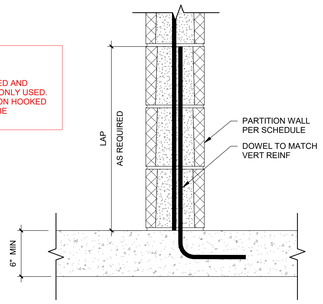
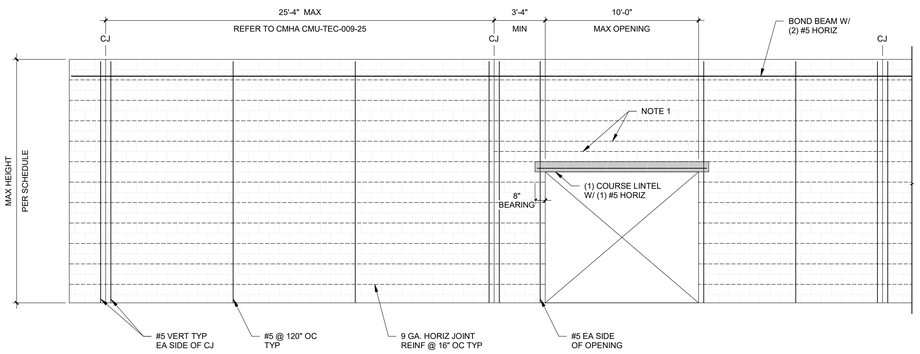
WOOD BEARING DETAILS

DESIGNER NOTES:

DESIGN REQUIREMENTS
1. POST INSTALLED DOWELS CAN BE CONSIDERED AND EPOXY INSTALLED REINFORCEMENT IS COMMONLY USED.
2. 6" MINIMUM SLAB THICKNESS SHOWN BASED ON HOOKED DOWEL REQUIREMENTS. THINNER SLAB MAY BE CONSIDERED BASED ON DESIGN LOADS.



9 TYPICAL PARTITION WALL
SCALE: 1 1/2" = 1'-0"



NOTES:

1. INSTALL 9 GA. LADDER TYPE JOINT REINFORCEMENT IN FIRST TWO JOINTS ABOVE OPENING FROM CONTROL JOINT TO CONTROL JOINT.
2. INSTALL 9 GA. LADDER TYPE JOINT REINFORCEMENT IN FIRST OR SECOND MORTAR JOINT BELOW SILL FROM CONTROL JOINT TO CONTROL JOINT.
3. LINTEL DESIGN IS BASED ON ARCHING ACTION AND SO CONTROL JOINTS MUST BE SPACED A MINIMUM OF 3'-4" FROM THE JAMB OF THE OPENING.
4. REINFORCEMENT SCHEDULE IS BASED ON A MAXIMUM HORIZONTAL LOAD OF 5 PSF, AS REQUIRED BY IBC SECTION 1607.15, ALONG WITH A LOAD FACTOR OF 1.6. WALL IS ASSUMED TO BE SIMPLY SUPPORTED WITH A SUPPORT AT THE BASE AND TOP OF WALL.

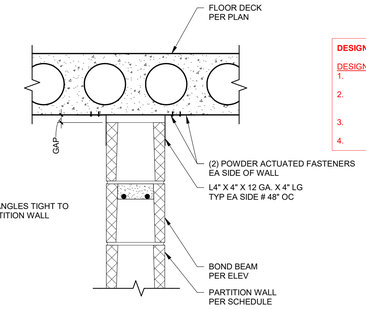
PARTITION SCHEDULE

NOMINAL THICKNESS	MAXIMUM HEIGHT
6-INCH	15'-4"
8-INCH	18'-0"
12-INCH	22'-8"

10 PARTITION SCHEDULE
SCALE: 1/4" = 1'-0"

DESIGNER NOTES:

DESIGN REQUIREMENTS
1. IF PARTITION WALL IS FIRE-RATED, THEN THE GAP MUST BE FILLED WITH A FIRE RETARDANT MATERIAL, SUCH AS MINERAL WOOL.
2. A PARTITION WALL IS NON-PARTICIPATING AND SO NO POSITIVE CONNECTION IS PERMITTED BETWEEN THE DIAPHRAGM AND THE MASONRY PARTITION WALL.
3. IT IS RECOMMENDED TO LOCATE THE BOND BEAM DOWN ONE COURSE TO ALLOW FOR PROPER GROUTING PROCEDURES.
4. GAP MUST BE VERIFIED WITH EXPECTED BUILDING MOVEMENTS.
5. VERIFY HOLLOW CORE STRAND LOCATION AND DEPTH TO ENSURE THAT POWDER ACTUATED FASTENERS DO NOT DAMAGE STRANDS OR IMPACT HOLLOW CORE SLAB CAPACITY.



NOTE:

INSTALL ANGLES TIGHT TO CMU PARTITION WALL

5 TYPICAL PARTITION WALL
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

DESIGN REQUIREMENTS
1. IF PARTITION WALL IS FIRE-RATED, THEN THE GAP MUST BE FILLED WITH A FIRE RETARDANT MATERIAL, SUCH AS MINERAL WOOL.
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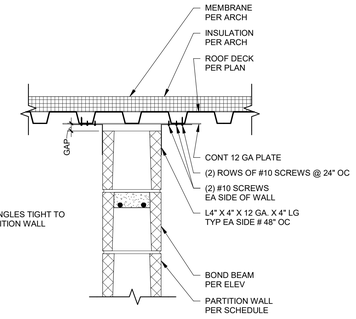
4. GAP MUST BE VERIFIED WITH EXPECTED BUILDING MOVEMENTS.



NOTE:

INSTALL ANGLES TIGHT TO CMU PARTITION WALL

1 TYPICAL PARTITION WALL
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

DESIGN REQUIREMENTS
1. IF PARTITION WALL IS FIRE-RATED, THEN THE GAP MUST BE FILLED WITH A FIRE RETARDANT MATERIAL, SUCH AS MINERAL WOOL.
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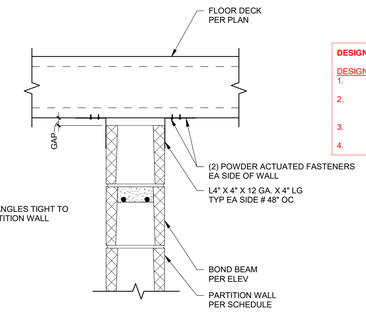
4. GAP MUST BE VERIFIED WITH EXPECTED BUILDING MOVEMENTS.



NOTE:

INSTALL ANGLES TIGHT TO CMU PARTITION WALL

6 TYPICAL PARTITION WALL
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

DESIGN REQUIREMENTS
1. IF PARTITION WALL IS FIRE-RATED, THEN THE GAP MUST BE FILLED WITH A FIRE RETARDANT MATERIAL, SUCH AS MINERAL WOOL.
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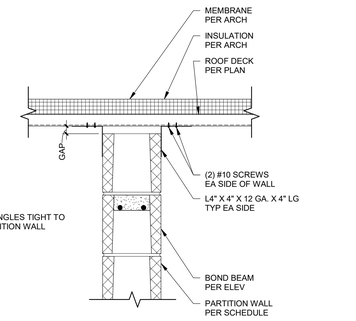

NOTE:

INSTALL ANGLES TIGHT TO CMU PARTITION WALL

2 TYPICAL PARTITION WALL
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

DESIGN REQUIREMENTS
1. IF PARTITION WALL IS FIRE-RATED, THEN THE GAP MUST BE FILLED WITH A FIRE RETARDANT MATERIAL, SUCH AS MINERAL WOOL.
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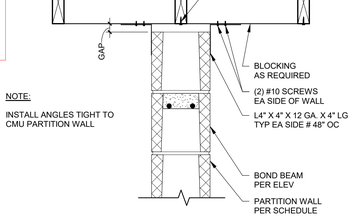
3. IT IS RECOMMENDED TO LOCATE THE BOND BEAM DOWN ONE COURSE TO ALLOW FOR PROPER GROUTING PROCEDURES.
4. GAP MUST BE VERIFIED WITH EXPECTED BUILDING MOVEMENTS.
5. COORDINATE INSTALLATION OF BLOCKING AT REQUIRED ANCHOR SPACING.



NOTE:

INSTALL ANGLES TIGHT TO CMU PARTITION WALL

7 TYPICAL PARTITION WALL
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

DESIGN REQUIREMENTS
1. IF PARTITION WALL IS FIRE-RATED, THEN THE GAP MUST BE FILLED WITH A FIRE RETARDANT MATERIAL, SUCH AS MINERAL WOOL.
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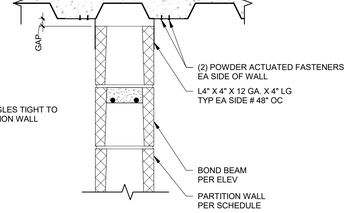
3. IT IS RECOMMENDED TO LOCATE THE BOND BEAM DOWN ONE COURSE TO ALLOW FOR PROPER GROUTING PROCEDURES.
4. GAP MUST BE VERIFIED WITH EXPECTED BUILDING MOVEMENTS.
5. VERIFY FLUTE SPACING WITH ANGLE LEG DIMENSIONS.



NOTE:

INSTALL ANGLES TIGHT TO CMU PARTITION WALL

3 TYPICAL PARTITION WALL
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

DESIGN REQUIREMENTS
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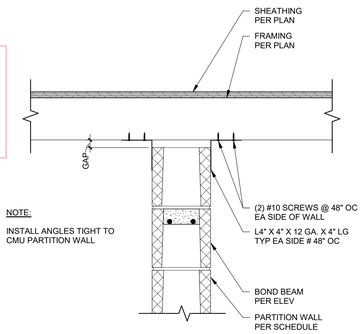
4. GAP MUST BE VERIFIED WITH EXPECTED BUILDING MOVEMENTS.



NOTE:

INSTALL ANGLES TIGHT TO CMU PARTITION WALL

8 TYPICAL PARTITION WALL
SCALE: 1 1/2" = 1'-0"

DESIGNER NOTES:

DESIGN REQUIREMENTS
1. IF PARTITION WALL IS FIRE-RATED, THEN THE GAP MUST BE FILLED WITH A FIRE RETARDANT MATERIAL, SUCH AS MINERAL WOOL.
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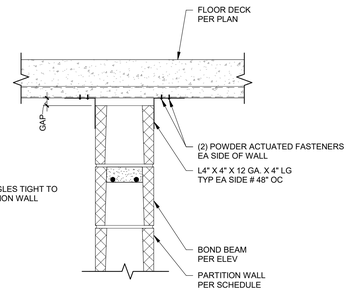
5. VERIFY FLUTE SPACING WITH ANGLE LEG DIMENSIONS.



NOTE:

INSTALL ANGLES TIGHT TO CMU PARTITION WALL

4 TYPICAL PARTITION WALL
SCALE: 1 1/2" = 1'-0"

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PARTITION WALL DETAILS