LAKESIDE SELF-STORAGE

4721 NEILLS CREEK ROAD
ANGIER NC, 27501
HARNETT COUNTY
NORTH CAROLINA

BUILDING G

G. CLEVELAND PATE, PLLC
Architecture • Planning
6013 Fordland Drive, Raleigh, NC 27606
919-851-0052

NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes and is subject to field inspection and verification.

Reviewed for Code Compliance

08/07/2026

Harnett COUNTY NORTH CAROLINA

INDEX OF SHEETS

LAKESIDE STORAGE

ANGIER, NORTH CAROLINA

SUBMITTED TO :

IS NIELLS CREEK, LLC.
ATTN: LA RUE POWELL
110 WILD WINDS DRIVE
COATS, NORTH CAROLINA 27521

PHONE: (919) 820-0143

NOTE: DETAIL LABELS CONTAINED WITHIN THIS SET OF PLANS MAY REFERENCE THE ERECTION DRAWINGS MARKED IN THIS SCHEDULE.
EXAMPLE: DETAIL A/900 REFERS TO DETAIL "A" LOCATED ON ERC900X.

ERECTION DRAWINGS

ERC010X		ERC200X		ERC420X		ERC619X		ERC750X			
ERC016X	X	ERC201X	X	ERC500X		ERC620X		ERC751X			
ERC100X	X	ERC202X	X	ERC505X	X	ERC621X		ERC752X			
ERC105X	X	ERC203X	X	ERC506X	X	ERC622X		ERC753X			
ERC106X		ERC204X		ERC515X		ERC623X		ERC754X			
ERC110X	X	ERC206X		ERC600X	X	ERC624X		ERC800X			
ERC112X		ERC207X		ERC601X	X	ERC625X		ERC900X			
ERC115X		ERC208X		ERC602X		ERC628X		ERC901X			
ERC120X		ERC209X		ERC603X		ERC630X	X	ERC902X			
ERC130X		ERC250X		ERC604X		ERC631X	X	ERC903X			
ERC150X		ERC250XFHP		ERC605X		ERC650X		ERC904X			
ERC151X		ERC251X		ERC606X		ERC651X		ERC905X			
ERC152X		ERC251XFHP		ERC607X		ERC652X		ERC907X			
ERC153X		ERC252X		ERC608X		ERC700X	X	ERC908X			
ERC154X		ERC251XFHP		ERC609X		ERC710X		ERC910X			
ERC155X		ERC253X		ERC610X	X	ERC711X		ERC911X			
ERC175X		ERC254X		ERC611X		ERC712X		ERC912X			
ERC176X		ERC255X		ERC612X		ERC713X		ERC913X			
ERC177X		ERC256X		ERC613X		ERC720X		ERC914X			
ERC178X		ERC257X		ERC614X		ERC725X		ERC915X			
ERC179X		ERC258X		ERC615X		ERC730X		ERC916X			
ERC180X		ERC302X(INS)		ERC616X		ERC731X		ERC917X			
ERC181X		ERC302X		ERC617X		ERC731XFHP		ERC918X			
ERC182X		ERC410XFL	X	ERC618X		ERC732X		ERC919X			
ERC183X		ERC411X		ERC618XALT		ERC732XFHP					

SCHEDULE OF DRAWINGS

DRAWING NO.	DESCRIPTION
CS	COVER SHEET
CS2	BUILDING NOTES
CS3	APPENDIX "B"
CS4	UL # U423
S1	ELEVATIONS & NOTES
S2	FLOOR PLAN & NOTES
S3	CROSS SECTION & DETAILS
F1	FOUNDATION PLAN & NOTES
F2	FOUNDATION DETAILS

WIND LOAD DESIGN DATA:

- ULTIMATE DESIGN WIND SPEED: (V_{ULT}) 108 MPH
- NOMINAL DESIGN WIND SPEED: (V_{ASD}) 84 MPH
- BUILDING CATEGORY: I
- WIND EXPOSURE: B
- INTERNAL PRESSURE COEFFICIENT: ± 0.18

SNOW LOAD DESIGN DATA:

- GROUND SNOW LOAD (Pg): 15 PSF
- FLAT-ROOF SNOW LOAD (Pf): 12.1 PSF
- SNOW EXPOSURE FACTOR (Ce): 1.2
- SNOW LOAD IMPORTANCE FACTOR (I): 0.8
- THERMAL FACTOR (Ct): 1.2

EARTHQUAKE LOAD DESIGN DATA:

- RISK CATEGORY: I
- SEISMIC IMPORTANCE FACTOR (I): 1.0
- SEISMIC DESIGN CATEGORY: B
- ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE (ASCE 7-16 SECTION 12.8)
- BASIC SEISMIC-FORCE-RESISTING SYSTEM: LIGHT FRAMED WALLS WITH STEEL SHEAR PANELS
- SITE CLASS: D
- DESIGN BASE SHEAR: BUILDING "G": 0.428^K
- RESPONSE MODIFICATION FACTOR (R): 7.0
- SEISMIC RESPONSE COEFFICIENT (C_S): 0.019
- MAPPED SPECTRAL RESPONSE ACCELERATION
  (S_S): 12.7% G
  (S_1): 6.3% G
- SPECTRAL RESPONSE COEFFICIENTS
  (S_{DS}): 13.6% G
  (S_{D1}): 10.1% G

BUILDING DATA :

BUILDING DESCRIPTION :

SINGLE STORY METAL BUILDING BOLTED TO CONCRETE SLAB FOUNDATION.

BUILDING SIZE :

BUILDING "G" VARIES = 4,500 sq. ft. 10'-0" EAVE HEIGHT

PARKING DATA :

SEE SITE PLAN BY OTHERS

BUILDING CODE :

THE 2024 NORTH CAROLINA BUILDING CODE

DESIGN CRITERIA :

THIS BUILDING HAS BEEN DESIGNED TO CONFORM TO THE STRUCTURAL REQUIREMENTS OF THE 2024 NORTH CAROLINA BUILDING CODE, WITH CURRENT REVISIONS.

THIS BUILDING HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADINGS IN ADDITION TO THE DEAD LOADINGS :

ROOF LIVE LOADING :	20 psf
FLOOR LIVE LOADING:	125 psf
USE GROUP:	S-1
TYPE OF CONSTRUCTION:	II-B

IT IS THE RESPONSIBILITY OF THE BUYER/OWNER TO VERIFY THE FIREWALL, LIVE LOAD AND WIND LOAD REQUIREMENTS WITH THE LOCAL CODE AUTHORITY.

PROJECT NUMBER :

NC26153 - G

NORTH CAROLINA PROFESSIONAL SEAL 027355 ENGINEER REED N SELF
7/27/2026

BETCO, Inc.
228 Commerce Blvd.
Statesville, NC 28625
Limited Engineering License # D-0140

GENERAL NOTES:

1. CONCRETE FOUNDATIONS AND FLOOR SLAB ARE TO BE SUPPLIED AND INSTALLED BY OTHERS . WEDGE ANCHORS FOR INTERIOR AND EXTERIOR FOOTINGS SUPPLIED AND INSTALLED BY BETCO.
2. EXTERIOR OPENINGS, NOT DESIGNATED AS DOOR LOCATIONS, TO BE COMPLETED USING EXTERIOR WALL PANELS FURNISHED BY BETCO.
3. USE DOW 791 SILICONE CAULK AND 1/2" WIDE BUTYL RUBBER TAPE SEALANT FOR ROOF INSTALLATION. USE DOW 799 SILICONE CAULK AT DOWNSPOUT TO GUTTER JOINT.
4. INTERIOR PARTITIONS PERPENDICULAR TO ROOF BEAM(S) MUST BE COMPLETED BEFORE ROOF PANELS ARE INSTALLED. USE PARTITION FRAMING TO PLUMB AND SQUARE COLUMNS AND HEADER SECTIONS. CHECK BUILDING WIDTH AT TOP OF COLUMNS PRIOR TO ROOF INSTALLATION.
5. THOROUGHLY SWEEP ROOF PANELS FOLLOWING INSTALLATION TO REMOVE METAL DRILLINGS.
6. THIS DESIGN IS BASED ON USING ONLY METAL BUILDING COMPONENTS WHICH ARE PROPRIETARY TO BETCO. FURTHER, THE PROFESSIONAL ENGINEER'S SEAL IS INVALID UNLESS ONLY BETCO METAL BUILDING COMPONENTS ARE UTILIZED.
7. METAL STUDS (IF APPLICABLE) MAY REQUIRE FIELD CUTTING DEPENDING UPON THE EAVE HEIGHT OF THE STRUCTURE.
8. UNIT SIZES SHOWN ARE NOMINAL. ACTUAL CLEAR DIMENSIONS INSIDE UNITS MAY VARY ACCORDING TO FINAL DESIGN OF COMPONENTS.
9. THESE DRAWINGS ARE THE PROPERTY OF BETCO, INC. AND MAY NOT BE USED OR REPRODUCED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF BETCO, INC.
10. THESE DRAWINGS SHALL BE USED IN CONJUNCTION WITH AND COORDINATED WITH THE ARCHITECTURAL DRAWINGS AND OTHER CONTRACT DOCUMENTS.
11. THE GENERAL CONTRACTOR SHALL VERIFY THE SIZE AND LOCATION OF ALL SLEEVES, PADS, DEPRESSIONS, OPENINGS, ETC. AS REQUIRED BY THE VARIOUS TRADES.

FOUNDATIONS:

1. THE FOUNDATION DESIGN IS BASED ON A PRESUMED ALLOWABLE SOIL BEARING PRESSURE OF 3000 PSF. NOTIFY ENGINEER IF SITE CONDITIONS DIFFER FROM DESIGN ASSUMPTIONS SPECIFIED.
2. IF FOOTING ELEVATIONS SHOWN OCCUR IN A DISTURBED, UNSTABLE OR UNSUITABLE SOIL, THE ENGINEER SHALL BE NOTIFIED.
3. TOP OF FOOTING ELEVATIONS ARE SHOWN ON THE DRAWINGS ARE TO BE DETERMINED BY THE CONTRACTOR IN THE FIELD IN ACCORDANCE WITH THE GUIDE LINES SET FORTH IN THE DRAWINGS AND SPECIFICATIONS.
4. FILL MATERIAL SHALL BE FREE OF ROOTS, WOOD OR OTHER ORGANIC MATERIAL AND COMPLY WITH THE REQUIREMENTS OF THE GEOTECHNICAL REPORT. MATERIALS USED FOR FILL UNDER FOOTINGS AND WITHIN BUILDING LIMITS SHALL BE TESTED AND APPROVED FOR THE USE BY THE GEOTECHNICAL TESTING AGENCY.
5. UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOUNDATIONS WITHOUT THE STRUCTURAL ENGINEERS APPROVAL.
6. FOUNDATION WALLS RETAINING EARTH SHALL BE BRACED AGAINST BACK FILLING PRESSURES UNTIL FLOOR SLABS AT TOP AND BOTTOM ARE IN PLACE.
7. FOUNDATION WALLS OR GRADE BEAMS HAVING EARTH PLACED ON EACH SIDE SHALL HAVE BOTH FILLED SIMULTANEOUSLY TO MAINTAIN A COMMON ELEVATION.
8. DO NOT PLACE CONCRETE IN ANY EXCAVATION CONTAINING ICE, FROST, FROZEN GROUND OR FREE WATER. FROZEN SUB GRADES MUST BE THAWED AND RECOMPACTED PRIOR TO PLACING CONCRETE.
9. EARTH FORMED FOOTINGS SHALL CONFORM TO THE SHAPE, LINES, AND DIMENSIONS AS SHOWN ON THE FOUNDATION PLAN. ALL WATER SHALL BE REMOVED BEFORE DEPOSITING CONCRETE.
10. BEFORE PLACING CONCRETE, ALL EMBEDDED ITEMS SHALL BE PROPERLY LOCATED, ACCURATELY POSITIONED, AND MAINTAINED SECURELY IN PLACE.
11. THE CONTRACTOR SHALL COORDINATE AND VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION, AND ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
12. PERIMETER FOUNDATION MUST NOT EXCEED 1/4" ELEVATION VARIATION ALONG ANY 50' DISTANCE OF BUILDING LENGTH.
13. PERIMETER FOUNDATION TO EXTEND BELOW FROST LINE. VERIFY REQUIRED DEPTH WITH LOCAL BUILDING OFFICIALS PRIOR TO PROCEEDING WITH FOUNDATION WORK AND NOTIFY ENGINEER OF DEVIATION FROM DRAWING.
14. THE AMERICAN CONCRETE INSTITUTE DOES NOT RECOGNIZE FIBERMESH AS A SUBSTITUTE FOR WIRE MESH REINFORCED CONCRETE WHEN SUBJECTED TO TENSILE STRESS
15. SAW CUT CONTROL JOINTS IN SLAB SURFACE AT APPROXIMATELY 10'-0" INTERVALS . . . OFFSET CUTS 2'-6" MINIMUM FROM INTERIOR COLUMN LINES.

REINFORCING STEEL:

1. REINFORCING STEEL SHALL BE NEW BILLET STEEL, DEFORMED BARS CONFORMING TO ASTM A-615, GRADE 60 (Fy-60,000 PSI).
2. FIELD BENDING OF CONCRETE REINFORCING STEEL IS NOT PERMITTED WITHOUT WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.
3. ALL REINFORCING SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI SP-66 'ACI DETAILING MANUAL-1994' AND THE 'CRSI MANUAL OF STANDARD PRACTICE', LATEST EDITION.
4. PLACE REINFORCEMENT AND TIES IN GROUT SPACES PRIOR TO GROUTING.
5. CONCRETE COVERAGE OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE FOLLOWING SCHEDULE UNLESS NOTED OTHERWISE.

A.	FOOTING AND GRADE BEAMS IN GROUND CONTACT	3 INCHES
B.	BEAMS AND COLUMNS	2 INCHES
C.	SLABS, WALLS, AND JOISTS	3/4 INCH - NOT EXPOSED TO EARTH, LIQUID OR WEATHER
D.	SLABS ON GRADE	2 INCHES FROM TOP
E.	FORMED SURFACES IN GROUND CONTACT	2 INCHES

6. DEVELOPMENT LENGTHS AND LAP SPLICES SHALL BE IN ACCORDANCE WITH ACI 318-19 CHAPTER 12 AND AS INDICATED ON THE DRAWINGS. WHERE SPLICES ARE NOT CALLED OUT ON THE DRAWINGS, USE CLASS "B", BUT IN NO CASE SHALL ANY SPLICE BE LESS THAN 12 INCHES. FOR BARS AS INDICATED BELOW THE BASIC DEVELOPMENT LENGTH SHALL BE MULTIPLIED BY THE FACTORS AS INDICATED FOR TENSION OR COMPRESSION AND THEN ROUNDED UP TO THE NEAREST WHOLE INCH. THE FACTORS INDICATED BELOW ARE CUMULATIVE FOR EACH OF THE CONDITIONS APPLICABLE.
7. WELDED WIRE MAT/FABRIC SHALL CONFORM TO ASTM A184 AND A185 RESPECTIVELY AND BE LAPPED 1'-0" AT ALL SPLICES.
8. ALL REINFORCING TERMINATING AT THE TOPS OF COLUMNS AND PILASTERS SHALL BE HOOKED UNLESS OTHERWISE NOTED.
9. SUBMIT SHOP DRAWINGS FOR FABRICATION, BENDING, AND PLACEMENT OF CONCRETE REINFORCEMENT. COMPLY WITH ACI DETAILING MANUAL (SP-66) SHOWING BAR SCHEDULES, STIRRUP SPACING, DIAGRAMS OF BENT BARS, ARRANGEMENT OF CONCRETE REINFORCEMENT. INCLUDE SPECIAL REINFORCEMENT REQUIRED AT OPENINGS THROUGH CONCRETE STRUCTURES. INCLUDE ALL ACCESSORIES SPECIFIED/ REQUIRED TO SUPPORT REINFORCING.
10. SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMISSION. DRAWINGS SHALL BEAR THE CONTRACTOR'S APPROVAL STAMP ACCEPTING RESPONSIBILTY FOR DIMENSIONS, QUANTITIES AND COORDINATION WITH THE OTHER TRADES.
11. CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER AND TESTING AGENCY A MINIMUM OF 48 HOURS PRIOR TO ALL CONCRETE POURS IN ORDER TO PERMIT REINFORCING STEEL REVIEW AS REQUIRED BY THE INSPECTION SCHEDULE.
12. REINFORCING IN ALL CONTINUOUS STRIP FOOTINGS SHALL HAVE CORNER BARS OR DOWELS. PROVIDE AT ALL CORNERS AND INTERSECTIONS.

CONSTRUCTION AND SAFETY:

1. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL SAFETY REGULATIONS, PROGRAMS AND PRECAUTIONS RELATED TO ALL WORK ON THIS PROJECT.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PROTECTION OF PERSONS AND PROPERTY EITHER ON OR ADJACENT TO THE PROJECT AND SHALL PROTECT SAME AGAINST INJURY, DAMAGE OR LOSS.
3. MEANS AND METHODS OF CONSTRUCTION AND ERECTION OF STRUCTURAL MATERIALS ARE SOLELY THE CONTRACTORS RESPONSIBILITY.
4. STRUCTURAL DRAWINGS ARE INTENDED TO BE USED IN CONJUNCTION WITH THE DRAWINGS OF OTHER CONSULTANTS AND TRADES. THE CONTRACTOR SHALL COORDINATE THE VARIOUS REQUIREMENTS.
5. NO OPENINGS NOR ANY CHANGES IN SIZE, DIMENSION OR LOCATION SHALL BE MADE IN ANY STRUCTURAL ELEMENTS WITHOUT WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.
6. THE CONTRACTOR IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPOSED ON THE STRUCTURE. SUCH LOADS SHALL NOT EXCEED THE CAPACITY OF THE STRUCTURE AT ANY TIME.
7. THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION, AND ANY TEMPORARY BRACING OR SUPPORT REQUIRED TO ACCOMMODATE THE CONTRACTORS MEANS AND METHODS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
8. THE CONTRACTOR SHALL INFORM THE STRUCTURAL ENGINEER, CLEARLY AND EXPLICITLY IN WRITING, OF ANY DEVIATION OR SUBSTITUTION OF REQUIREMENTS OF THE CONTRACT DOCUMENTS. CONTRACTOR IS NOT RELIEVED OF ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS BY VIRTUE OF THE STRUCTURAL ENGINEERS REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC., UNLESS THE CONTRACTOR HAS CLEARLY AND EXPLICITLY INFORMED THE STRUCTURAL ENGINEER IN WRITING, OF ANY DEVIATIONS OR SUBSTITUTIONS AT TIME OF SUBMISSION, AND THE STRUCTURAL ENGINEER HAS GIVEN WRITTEN APPROVAL FOR THE SPECIFIC DEVIATIONS OR SUBSTITUTIONS.
9. ALL THINGS WHICH, IN THE OPINION OF THE CONTRACTOR, APPEAR TO BE DEFICIENCIES, OMISSIONS, CONTRADICTIONS OR AMBIGUITIES IN THE DRAWINGS OR SPECIFICATIONS, SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER. CORRECTIONS OR WRITTEN INTERPRETATIONS SHALL BE ISSUED BEFORE AFFECTED WORK MAY PROCEED.
10. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO ORDERING MATERIALS OR PROCEEDING WITH NEW WORK IN AREAS AFFECTED BY THE EXISTING CONDITIONS. STRUCTURAL ENGINEER SHALL BE INFORMED IN WRITING OF CONFLICTS BETWEEN EXISTING AND PROPOSED NEW CONSTRUCTION.
11. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL DIMENSIONS SHOWN ON THE CONTRACT DOCUMENTS. INCONSISTENCIES ON THE STRUCTURAL DRAWINGS OR BETWEEN THE STRUCTURAL DRAWINGS AND ANY OTHER CONTRACT, SHOP, FABRICATION, OR OTHER DRAWINGS OR INFORMATION SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER PRIOR TO PROCEEDING WITH AFFECTED WORK.
12. DO NOT SCALE THESE DRAWINGS, USE THE DIMENSIONS SHOWN.

CONCRETE:

1. SUBMIT WRITTEN REPORTS OF EACH PROPOSED CONCRETE DESIGN MIX NOT LESS THAN 15 DAYS PRIOR TO THE START OF WORK. DESIGN MIXES PREPARED MORE THAN TWELVE (12) MONTHS PRIOR TO THE DATE THE SUBMITTAL ARE NOT PERMITTED.
2. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT ACI BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-19).
3. ALL CONCRETE SHALL BE TESTED BY AN INDEPENDENT TESTING AGENCY FOR STANDARD PARAMETERS (SLUMP, COMPRESSIVE STRENGTH, ETC.) TWO COPIES OF ALL REPORTS SHALL BE SUBMITTED TO THE ENGINEER/ ARCHITECT.
4. ALL NORMAL WEIGHT CONCRETE SHALL HAVE ASTM C-33 AGGREGATE WITH MAXIMUM UNIT WEIGHT OF 150 PCF. CONCRETE COMPRESSIVE STRENGTH SHALL BE 3000 PSI AT 28 DAYS, MINIMUM FOR FOUNDATIONS AND SLABS ON GRADE. ALL CONCRETE FOR FLOOR SLABS ON METAL DECK FORMS SHALL BE NORMAL WEIGHT CONCRETE WITH COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
5. MIX DESIGNS, INCLUDING WATER CEMENT RATIOS AND SLUMPS, SHALL BE PREPARED IN ACCORDANCE WITH MOST CURRENT ACI 301 CHAPTER 3, EXCEPT WHERE NOTED OTHERWISE IN THE PROJECT SPECIFICATIONS. CEMENT SHALL CONFORM TO ASTM C 150 TYPE I OR AT CONTRACTOR'S OPTION, ASTM C 595 TYPE IP WHERE FLY ASH IS PERMITTED. NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C 33 AGGREGATE WITH MAXIMUM UNIT WEIGHT OF 150 PCF AND LIGHT WEIGHT CONCRETE SHALL CONFORM TO ASTM C 330 AGGREGATE. NO ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL BE PERMITTED IN ANY CONCRETE.

   AGGREGATE SIZES SHALL BE:
   - I. FORMED CONCRETE ELEMENTS, U.N.O. ____ #67 STONE (3/4" MAX)
   - II. GRADE SLABS AND EARTH FORMED ELEMENTS ____ #57 STONE (1" MAX)
   - III. COARSE MASONRY GROUT REQUIRED ____ #67 STONE (3/4" MAX)
   - IV. FINE MASONRY GROUT REQUIRED ____ #8 STONE (3/8" MAX)

6. WATER REDUCING ADMIXTURE SHALL BE USED IN ALL CONCRETE.
7. AIR ENTRAINING ADMIXTURE IN ACCORDANCE WITH ACI 301-84 TABLE 3.4.1, SHALL BE USED IN ALL CONCRETE EXPOSED TO FREEZING AND THAWING DURING CONSTRUCTION OR SERVICE CONDITIONS.
8. WATER/CEMENT RATIO SHALL NOT EXCEED 0.45 FOR ANY CONCRETE SUBJECTED TO FREEZING/THAWING.
9. ALL PUMPED CONCRETE SHALL HAVE A WATER/CEMENT RATIO LESS THAN 0.45 AND SHALL CONTAIN A HIGH RANGE WATER REDUCING ADMIXTURE (SUPERPLASTICIZER).
10. IN NO CASE SHALL A WATER/CEMENT RATIOS EXCEED THE FOLLOWING:
    - I. ALL FOUNDATION CONCRETE f'c 3000 psi ____ 0.55 MAX. W/C RATIO
    - II. EXTERIOR PAVING CONCRETE f'c 3500 psi ____ 0.50 MAX. W/C RATIO
    - III. ALL EXPOSED C.I.P. WATERTABLE, PIERS, ETC., f'c 3500 psi ____ 0.45 MAX. W/C RATIO
    - IIII. SLABS ON GRADE f'c 3000 psi ____ 0.45 MAX. W/C RATIO
11. LIQUID MEMBRANE CURING COMPOUND WITH A MINIMUM 30% SOLIDS CONTENT SHALL BE APPLIED WITHIN TWO (2) HOURS AFTER COMPLETION OF FINISHING TO ALL CONCRETE FLATWORK AND WALLS, U.N.O., OTHER THAN FOOTINGS AND GRADE BEAMS.
12. FLOORS IN AREAS RECEIVING QUARRY TILE, CERAMIC TILE AND LIQUID FLOOR HARDENER SHALL BE CURED WITH DISSIPATING LIQUID MEMBRANE CURING COMPOUND OR WET CURED BY USE OF MOISTURE RETAINING COVER. DISSIPATING CURING COMPOUND SHALL BE THOROUGHLY BROOMED AND WASHED OFF PRIOR TO APPLICATION OF FLOOR FINISH.
13. USE A NON-CORROSIVE, NON-CHLORIDE ACCELERATING ADMIXTURE IN CONCRETE EXPOSED TO TEMPERATURES BELOW 40 DEGREES. UNIFORMLY HEAT THE WATER AND AGGREGATES TO A TEMPERATURE OF NOT LESS THAN 50 DEGREES. PLACE AND CURE CONCRETE IN ACCORDANCE WITH ACI 306.
14. ALL CONSTRUCTION JOINTS SHOWN ON THE DRAWINGS SHALL BE INCORPORATED INTO THE STRUCTURE UNLESS THEIR ELIMINATION IS APPROVED BY THE STRUCTURAL ENGINEER.
15. REINFORCING IN ALL ABUTTING CONCRETE, INCLUDING FOOTINGS, SHALL BE CONTINUOUS THROUGH OR AROUND ALL CORNERS OR INTERSECTIONS. DOWELS OR SPLICES SHALL BE EQUAL IN SIZE AND SPACING TO THE REINFORCING IN THE ABUTTING MEMBERS.
16. REFER TO ARCHITECTURAL DRAWINGS FOR DOOR AND WINDOW OPENINGS, DRIPS, REGLETS, WASHES, MASONRY ANCHORS, BRICK LEDGE ELEVATIONS, SLAB DEPRESSIONS AND MISCELLANEOUS EMBEDDED PLATES, BOLTS, ANCHORS, ANGLES, ETC.
17. FORMS FOR ROUND COLUMNS SHALL BE ONE PIECE FIBERGLASS FORM TO PRODUCE SMOOTH FINISH ON EXPOSED COLUMNS.
18. REFER TO ARCHITECTURAL DRAWINGS FOR CONCRETE FINISHES. WHERE FINISH IS NOT SPECIFIED, CONFORM TO REQUIREMENTS OF ACI 301.
19. BASE PLATES, ANCHOR RODS, SUPPORT ANGLES AND OTHER STEEL EXPOSED TO EARTH OR GRANULAR FILL SHALL BE COVERED WITH A MINIMUM OF 3" OF CONCRETE.
20. FINISHING TOLERANCE SHALL BE WITHIN CLASS B IN ACCORDANCE WITH ACI 301 AND CONSIDERATION SHALL BE GIVEN TO SEQUENCING OF CONCRETE PLACEMENT TO FACILIATE CONTROL OF FINISH ELEVATIONS.
21. NON-SHRINK GROUT SHALL BE PRE-MIXED, NON-CORROSIVE, NON-METALLIC, NON-STAINING CONTAINING SILICA SANDS, PORTLAND CEMENT, SHRINKAGE COMPENSATING AND WATER REDUCING AGENTS. PRODUCTS SHALL ONLY REQUIRE THE ADDITION OF WATER. MINIMUM COMPRESSIVE STRENGTH SHALL BE 5000 PSI AFTER ONE DAY AND 10000 PSI AFTER 28 DAYS. GROUT SHALL BE FREE OF GAS PRODUCING OR AIR RELEASING AND OXIDIZING AGENTS AND CONTAIN NO CORROSIVE IRON, ALUMINUM OR GYPSUM.
22. PROVIDE CONCRETE GROUT - NOT MORTAR - FOR REINFORCING MASONRY LINTEL AND BOND BEAMS WHERE INDICATED ON DRAWINGS OR AS SCHEDULED.
23. TOLERANCE FOR ANCHOR RODS AND OTHER EMBEDDED ITEMS SHALL BE PER THE AISC CODE OF STANDARD PRACTICE SECTION 7.5.
24. UNLESS OTHERWISE SHOWN IN THE ARCHITECTURAL DRAWINGS, PROVIDE 3/4" CHAMFERS AT ALL COLUMN, WALL, SLAB, OR BEAM EDGES THAT ARE EXPOSED TO VIEW IN THE FINISHED STRUCTURE.

RELEASE FOR CONSTRUCTION DATE 7/27/2026

BETCO, Inc.
228 Commerce Blvd.
Statesville, NC 28625
Limited Engineering License # D-0140

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027355 REED N SELF 7/27/2026

REVISIONS	DATE	BY

DATE: 7/20/26
DRAWN BY: CWM
SCALE: AS NOTED
APPROVED BY:

BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800) 654-7813

PROJECT NAME: LAKESIDE STORAGE
PROJECT ADDRESS: ANGIER, NORTH CAROLINA
OWNER: IS NIELLS CREEK, LLC.
PROJECT NO.: NC26153-G
SHEET TITLE: BUILDING NOTES BUILDING "G"
DRAWING NUMBER: CS2 OF 4

2024 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)
(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: Lakeside Storage
Address: Angier, NC Zip Code: 27501
Owner/Authorized Agent: La Rue Powell Phone # (919) 820-0143 E-Mail:
Owned By: Private
Code Enforcement Jurisdiction: County

CONTACT:

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural				(___)_____	
Civil				(___)_____	
Electrical				(___)_____	
Fire Alarm				(___)_____	
Plumbing				(___)_____	
Mechanical				(___)_____	
Sprinkler-Standpipe				(___)_____	
Structural	Betco	Self	27355	(704)872-2999	reeds@betcoinc.com
Retaining Walls >5' High				(___)_____	
Other				(___)_____	

("Other" should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

2024 NC BUILDING CODE: New Building

2024 NC EXISTING BUILDING CODE: N/A N/A N/A
CONSTRUCTED: (date) _____ **CURRENT OCCUPANCY(S)** (Ch. 3)**:** _____
RENOVATED: (date) _____ **PROPOSED OCCUPANCY(S)** (Ch. 3)**:** _____

OCCUPANCY CATEGORY (Table 1604.5)**: Current:** N/A **Proposed:** I

BASIC BUILDING DATA
Construction Type: II-B
Sprinklers: Select one Select one
Standpipes: Select one
Primary Fire District: Select one **Flood Hazard Area:** Select one
Special Inspections Required: Select one

Gross Building Area Table

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
Building G		4500	4500
TOTAL		4500	4500

ALLOWABLE AREA

Primary Occupancy Classification(s): Storage - S-1 N/A N/A N/A N/A N/A
Accessory Occupancy Classification(s): _____
Incidental Uses (Table 509): _____
Special Uses (Chapter 4 – List Code Sections): _____

Special Provisions: (Chapter 5 – List Code Sections): _____
Mixed Occupancy: No Separation: Select one Exception: _____
Select one

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$$

_____ + _____ + ... = _____ ≤ 1.00

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2[4] AREA	(C) AREA FOR FRONTAGE INCREASE[1,2]	(D) ALLOWABLE AREA PER STORY OR UNLIMITED[2,3]
Bldg G	S-1	4500	17500	0	17500

[1] Frontage area increases from Section 506.2 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = _____ (F)
b. Total Building Perimeter = _____ (P)
c. Ratio (F/P) = _____ (F/P)
d. W = Minimum width of public way = _____ (W)
e. Percent of frontage increase $I_f = 100[F/P - 0.25]$ x W/30 = _____ (%)
[2] Unlimited area applicable under conditions of Section 507.
[3] Maximum Building Area = total number of stories in the building x D (maximum3 stories) (506.2).
[4] The maximum area of open parking garages must comply with Table 406.5.4. The maximum area of air traffic control towers must comply with Table 412.3.1.
[5] Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	55 ft	10 ft	
Building Height in Stories (Table 504.4)	2	1	

[1] Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (w/ [1] REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses		NC					
Bearing Walls							
Exterior	>= 10 ft						
North	>= 10 ft						
East	>= 10 ft						
West	>= 10 ft						
South	>= 10 ft						
Interior							
Nonbearing Walls and Partitions Exterior walls	N/A						
North	N/A						
East	N/A						
West	N/A						
South	N/A						
Interior walls and partitions	N/A						
Floor Construction including supporting beams and joists	N/A						
Floor Ceiling Assembly	N/A						
Columns Supporting Floors		NC					
Roof Construction, including supporting beams and joists							
Roof Ceiling Assembly	N/A						
Columns Supporting Roof	N/A						
Shaft Enclosures - Exit	N/A						
Shaft Enclosures - Other	N/A						
Corridor Separation	N/A						
Occupancy/Fire Barrier Separation		1 hr		C34	U423		
Party/Fire Wall Separation	N/A						
Smoke Barrier Separation	N/A						
Smoke Partition	N/A						
Tenant/Dwelling Unit/ Sleeping Unit Separation	N/A						
Incidental Use Separation	N/A						

* Indicate section number permitting reduction NC--Non-combustible

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: Select one
Exit Signs: Select one
Fire Alarm: Select one
Smoke Detection Systems: Select one
Carbon Monoxide Detection: Select one

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: _____

- ☐ Fire and/or smoke rated wall locations (Chapter 7)
- ☐ Assumed and real property line locations (if not on the site plan)
- ☐ Exterior wall opening area with respect to distance to assumed property lines (705.8)
- ☐ Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)
- ☐ Occupant loads for each area
- ☐ Exit access travel distances (1017)
- ☐ Common path of travel distances (Tables 1006.2.1 & 1006.3.2(1))
- ☐ Dead end lengths (1020.4)

- ☐ Clear exit widths for each exit door
- ☐ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
- ☐ Actual occupant load for each exit door
- ☐ A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
- ☐ Location of doors with panic hardware (1010.1.10)
- ☐ Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
- ☐ Location of doors with electromagnetic egress locks (1010.1.9.9)
- ☐ Location of doors equipped with hold-open devices
- ☐ Location of emergency escape windows (1030)
- ☐ The square footage of each fire area (202)
- ☐ The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)
- ☐ Note any code exceptions or table notes that may have been utilized regarding the items above

ACCESSIBLE DWELLING UNITS
(SECTION 1107)

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED

ACCESSIBLE PARKING
(SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES REQUIRED	TOTAL # OF PARKING SPACES PROVIDED	# OF ACCESSIBLE SPACES PROVIDED: REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH: 132" ACCESS AISLE	VAN SPACES WITH: 8' ACCESS AISLE	TOTAL # ACCESSIBLE PROVIDED
TOTAL						

PLUMBING FIXTURE REQUIREMENTS
(TABLE# 2902.1)

USE		WATER CLOSETS MALE	WATER CLOSETS FEMALE	WATER CLOSETS UNISEX	URINALS	LAVATORIES MALE	LAVATORIES FEMALE	LAVATORIES UNISEX	SHOWERS / TUBS	DRINKING FOUNTAINS REGULAR	DRINKING FOUNTAINS ACCESSIBLE
SPACE	EXIST'G										
	NEW										
	REQ'D										

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, etc., describe below)

_____

_____

ENERGY SUMMARY

ENERGY REQUIREMENTS:
The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.

Existing building envelope complies with code: Select one

Exempt Building: Yes Provide code or statutory reference: N.C.G.S 143-138

Climate Zone: Select one

Method of Compliance: Select one
(If "Other" specify source here)_____

THERMAL ENVELOPE (Prescriptive method only)

Roof/ceiling Assembly (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____
Skylights in each assembly: _____
U-Value of skylight: _____
total square footage of skylights in each assembly: _____

Exterior Walls (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____
Openings (windows or doors with glazing)
U-Value of assembly: _____
Solar heat gain coefficient: _____
projection factor: _____
Door R-Values: _____

Walls below grade (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____

Floors over unconditioned space (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____

Floors slab on grade
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____
Horizontal/vertical requirement: _____
slab heated: _____

2024 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
STRUCTURAL DESIGN
(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESIGN LOADS:

Importance Factors: Snow (I_s) 0.80
Seismic (I_s) 1.0

Live Loads: Roof 20 psf
Mezzanine N/A psf
Floor 125 psf

Ground Snow Load: 15 psf

Wind Load: Design Wind Speed V(ultimate)= 108 mph (ASCE 7-16)
Exposure Category B
Wind Base Shear (MWFRS): Vx=24.1k Vy=65.9 k

SEISMIC DESIGN CATEGORY: B
Provide the following Seismic Design Parameters:
Risk Category (Table 1604.5) I
Spectral Response Acceleration S_s =12.7 %g S_1 =6.3 %g
Site Classification (ASCE 7) D
Data Source: Presumptive
Basic structural system Building Frame
Seismic Base Shear: Vx=0.428 k Vy=0.428 k

Analysis Procedure: Equivalent Lateral Force
Architectural, Mechanical, Components anchored? Yes

LATERAL DESIGN CONTROL: Wind

SOIL BEARING CAPACITIES:
Presumptive Bearing Capicity 3000 psf
Pile size, type, and capacity _____

2024 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
MECHANICAL DESIGN
(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone
winter dry bulb: _____
summer dry bulb: _____

Interior design conditions
winter dry bulb: _____
summer dry bulb: _____
relative humidity: _____

Building heating load: _____

Building cooling load: _____

Mechanical Spacing Conditioning System
Unitary
description of unit: _____
heating efficiency: _____
cooling efficiency: _____
size category of unit: _____
Boiler
Size category. If oversized, state reason.: _____
Chiller
Size category. If oversized, state reason.: _____

List equipment efficiencies: _____

2024 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
ELECTRICAL DESIGN
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance: Select one

Lighting schedule (each fixture type)
lamp type required in fixture
number of lamps in fixture
ballast type used in the fixture
number of ballasts in fixture
total wattage per fixture
total interior wattage specified vs. allowed (whole building or space by space)
total exterior wattage specified vs. allowed

Additional Efficiency Package Options
(When using the 2024 NCECC; not required for ASHRAE 90.1)
- ☐ C406.2 More Efficient HVAC Equipment Performance
- ☐ C406.3 Reduced Lighting Power Density
- ☐ C406.4 Enhanced Digital Lighting Controls
- ☐ C406.5 On-Site Renewable Energy
- ☐ C406.6 Dedicated Outdoor Air System
- ☐ C406.7 Reduced Energy Use in Service Water Heating

BETCO, Inc.
228 Commerce Blvd.
Statesville, NC 28625
Limited Engineering License # D-0140

REVISIONS	DATE	BY

DATE: 7/20/26
DRAWN BY: CWM
SCALE: AS NOTED
APPROVED BY:

BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800) 654-7813

PROJECT NAME: LAKESIDE STORAGE
PROJECT ADDRESS: ANGIER, NORTH CAROLINA
OWNER: IS NIELLS CREEK, LLC.
PROJECT NO.: NC26153-G
SHEET TITLE: APPENDIX "B" BUILDING "G"
DRAWING NUMBER: CS3 OF 4

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Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States
BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States
Design Criteria and Allowable Variances

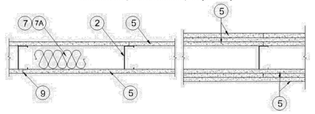
See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada
Design Criteria and Allowable Variances

Design No. **U423**

March 05, 2026

Bearing Wall Ratings — 3/4 Hr, 1, 1-1/2 or 2 Hr (See Items 5 & 7)
This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**



one stud cavity on opposite sides of studs. All joints in outer layers staggered with joints in inner layers. For 2 layer assemblies inner layer attached to studs with 1-1/4 in. long Type S steel screws spaced 8 in. OC, outer layer will be attached to studs over inner layer with the 1-7/8 in. long steel screws spaced 8 in. OC. For 3 layer assemblies inner layers installed as described in the 2 layer system above, third layer attached to studs over inner layers with 2-5/8 in. long steel screws spaced 8 in. OC.

6. **Fasteners —** (Not Shown) — For use with item 5 - Type S-12 steel screws used to attach panels to runners (Item 1 or 1A) and studs (Item 2 or 2A) or furring channels (Item 8). **Single layer systems:** 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 8 in. OC when panels are applied horizontally, or 12 in. OC when panels are applied vertically. **Single layer system with Type ULIX:** 1 in. long, spaced 12 in. OC along the perimeter and in the field when panels are applied horizontally or vertically. **Two layer systems:** First layer- 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC. Second layer- 1-5/8 in. long for 1/2 in. and 5/8 in. thick panels or 2-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC with screws offset 8 in. from first layer. **Three-layer systems:** First layer- 1 in. long for 1/2 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below.

7. **Batts and Blankets* —** (Required as indicated under Item 5) — Nom 2 in. thick mineral wool batts, friction fitted between studs and runners. See **Batts and Blankets (BKNV or BZJZ) Categories** for names of Classified companies.

7A. **Batts and Blankets* —** (Optional, Not Shown) — Placed in stud cavities, any glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. See **Batts and Blankets (BKNV or BZJZ) Categories** for names of Classified companies.

7B. **Batts and Blankets* —** (Optional, Not Shown) — Placed in stud cavities, glass fiber insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance.
Owens Corning Corporate Services, LLC — Type QuietZone Acoustic Batts

7C. **Fiber, Sprayed* —** (Optional) — As an alternate to Batts and Blankets (Item 7) — Not for use with items 8A or 8B) — Spray applied mineral wool insulation. The fiber is applied with adhesive, at a minimum density of 4.0 pcf, to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. See Fiber, Sprayed (CCAZ).
AMERICAN ROCKWOOL MANUFACTURING, LLC — Type Rockwool Premium Plus

8. **Furring Channels —** (Optional on one or both sides, not shown, for single or double layer systems) — Resilient furring channels fabricated from min 25 MSG corrosion-protected steel, spaced vertically a max of 24 in. OC. Flange portion attached to each intersecting stud with 1/2 in. long Type S-12 panhead steel screws. Not for use with type FRX-G gypsum panels and items 5A, 5C, 5D, or 5E.

1. **Floor and Ceiling Runners —** (Not Shown) — Channel shaped, fabricated from min 0.0329 in., bare metal thickness (No. 20 MSG) corrosion-protected steel, that provide a sound structural connection between steel studs and adjacent assemblies such as floors, ceilings and/or other walls. Attached to floor and ceiling assemblies with steel fasteners spaced not greater than 24 in. OC.

1A. **Floor and Ceiling Runners —** (Not Shown, As an alternate to Item 1, For Use With Item 5A and 5C) — Channel shaped runners min 3-1/2 in. deep with 1-1/4 in. flanges fabricated from min No. 20 MSG corrosion-protected steel. Attached to floor and ceiling assemblies with steel fasteners spaced not greater than 24 in. OC.

2. **Steel Studs —** Min 0.0329 in., bare metal thickness (No. 20 MSG) corrosion-protected steel studs, min 3-1/2 in. wide, cold formed, designed in accordance with the current edition of the Specification for the Design of Cold-Formed Steel Structural Members by the American Iron and Steel Institute (AISI). All design details enhancing the structural integrity of the wall assembly, including the axial design load of the studs, shall be as specified by the steel stud designer and/or producer, and shall meet the requirements of all applicable local code agencies. The max stud spacing shall not exceed 24 in. OC. Studs attached to floor and ceiling runners with 1/2 in. long Type S-12 steel screws on both sides of the studs or by welded or bolted connections designed in accordance with the AISI specifications.

2A. **Steel Studs —** (As an alternate to Item 2, For use with item 5A, 5C, 5D, and 5E) — Channel shaped, fabricated from min 20 MSG corrosion-protected or galv steel, 3-1/2 in. min width, min 1-1/2 in. flanges and 1/4 in. return, spaced a max of 16 in. OC. Studs friction-fit into floor and ceiling runners.

2B. **Steel Studs —** (As an alternate to Item 2 and 2A, For Use With Item 5B) — Min 0.0329 in., (No. 20 MSG) corrosion-protected cold formed steel studs, min 3-1/2 in. deep by 1-5/8 in. wide with 1/2 in. returns. Braced at mid-height and designed in accordance with the current edition of the Specification for the Design of Cold-Formed Steel Structural Members by the American Iron and Steel Institute (AISI). All design details enhancing the structural integrity of the wall assembly, including the axial design load of the studs, shall be as specified by the steel stud designer and/or producer, and shall meet the requirements of all applicable local code agencies. The max stud spacing shall not exceed 24 in. OC. Studs attached to floor and ceiling runners with 1/2 in. long Type S-12 steel screws on both sides of the studs or by welded or bolted connections designed in accordance with the AISI specifications.

2C. **Framing Members - Steel Studs —** (As an alternate to Item 2, For use with Item 5C) — Channel shaped, fabricated from min 20 MSG (0.0327 in. thick) corrosion-protected or galv steel, 3-1/2 in. min width, min 1-1/2 in. flanges and 1/4 in. return, spaced a max of 16 in. OC. Studs friction-fit into floor and ceiling runners. Studs to be cut 5/8 to 3/4 in. less than assembly height.

3. **Lateral Support Members —** (Not shown) — Where required for lateral support of studs, support shall be provided by means of steel straps, channels or other similar means as specified in the design of a particular steel stud wall system.

4. **Wood Structural Panel Sheathing —** (Optional, For use with Item 5 only) — (Not Shown) — 4 ft wide, 7/16 in. thick oriented strand board (OSB) or 15/32 in. thick structural 1 sheathing (plywood) complying with DOC PS1 or PS2, or APA Standard PRP-108, manufactured with exterior glue, applied horizontally or vertically to the steel studs. Vertical joints centered on studs, and staggered one stud space from wallboard joints. Attached to studs with flat-head self-drilling tapping screws with a min. head diam. of 0.292 in. at maximum 6 in. OC. in the perimeter and 12 in. OC. in the field. When used, gypsum panels attached over OSB or plywood panels and fastener lengths for gypsum panels increased by min. 1/2 in. The maximum loading on the steel studs was evaluated with the steel studs braced at mid-height and not braced by the plywood sheathing.

5. **Gypsum Board* —** Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Vertical joints in adjacent layers (multilayer systems) staggered one stud cavity. Horizontal joints need not be backed by steel framing. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered when load is reduced to 90 percent of max stud capacity. When load is at 100 percent, horizontal edge joints and horizontal butt joints on opposite sides of studs staggered a min of 12 in. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered at 100 percent load with Type ULIX. Horizontal edge joints and horizontal butt joints in adjacent layers (multilayer systems) staggered a min of 12 in. Horizontal edge joints and horizontal butt joints in adjacent layers (multilayer systems) with Type ULIX need not be staggered. When used in widths other than 48 in., gypsum panels to be installed horizontally. The thickness and number of layers and percent of design load for the 45 min, 1 hr, 1-1/2 hr, and 2 hr ratings are as follows:

Wallboard Protection on Each Side of Wall

Rating	No. of Layers & Thkns of Panel	% of Design Load
45 Min	1 layer, 1/2 in. thick	100
1 hr	1 layer, 5/8 in. thick	100
1-1/2 hr	2 layers, 1/2 in. thick	100
2 hr	2 layers, 5/8 in. thick	80
2 hr@	2 layers, 5/8 in. thick	100
2 hr	3 layers, 1/2 in. thick	100
2 hr	2 layers, 3/4 in. thick	100

@Rating applicable when Batts and Blankets (Item 7) are used.

CGC INC — 1/2 in. thick Type IP-X2, IPC-AR, C, WRC, or; 5/8 in. thick Type SCX, SHX, WRX, IP-X1, AR, C, IP-AR, IP-X2, IPC-AR, ULIX, ULX, or WRC; 3/4 in. thick Types AR, IP-AR, IP-X3, ULTRACODE

UNITED STATES GYPSUM CO — 1/2 in. thick Type C, IP-X2, IPC-AR, or WRC; 5/8 in. thick Type AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC- AR, SCX, SGX, SHX, ULIX, ULX, WRX, or WRC; 3/4 in. thick Types AR, IP-AR or IP-X3, ULTRACODE

USG BORAL DRYWALL SFZ LLC — 1/2 in. Type C; 5/8 in. Types C, SCX, SGX, ULTRACODE

USG MEXICO S A DE C V — 1/2 in. thick Type C, IP-X2, IPC-AR, WRC; 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC- AR, SCX, SHX, ULX, WRX or WRC; 3/4 in. thick Types AR, IP-AR, IP-X3, ULTRACODE

8A. **Steel Framing Members (Not Shown)* —** (Optional on one or both sides, not shown, for single or double layer systems) — As an alternate to Item 8, furring channels and Steel Framing Members as described below:

a. **Furring Channels —** Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum board attached to furring channels as described in Item 6. Not for use with type FRX-G gypsum panels and items 5A, 5C, 5D, or 5E.

b. **Steel Framing Members* —** Used to attach furring channels (item 8a) to studs (Item 2). Clips spaced max. 48 in. OC., and secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, S-12 steel screw through the center grommet. Furring channels are friction fitted into clips. RSIC-1 clip for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) clip for use with 2-23/32 in. wide furring channels.
PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-1 (2.75).

8B. **Steel Framing Members* —** (Not Shown) — (Optional on one or both sides, not shown, for single or double layer systems) — As an alternate to Item 8, furring channels and Steel Framing Members as described below:

a. **Furring Channels —** Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum board attached to furring channels as described in Item 6. Not for use with type FRX-G gypsum panels and Items 5A, 5C, 5D, or 5E.

b. **Steel Framing Members* —** Used to attach furring channels to studs (Item 2). Clips spaced max. 48 in. OC., and secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, S-12 steel screw through the center grommet. Furring channels are friction fitted into clips.
PLITEQ INC — Type GENIECLIP

8C. **Steel Framing Members* —** (Not Shown) — (Optional on one or both sides, not shown, for single or double layer systems) — As an alternate to Item 8, furring channels and Steel Framing Members as described below:

a. **Furring Channels —** Formed of No. 25 MSG galv steel, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 6. Not for use with type FRX-G gypsum panels and Items 5A, 5C, 5D, or 5E.

b. **Steel Framing Members* —** Used to attach furring channels to studs (Item 2). Clips spaced max. 48 in. OC., and secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, S-12 steel screw through the center grommet. Furring channels are friction fitted into clips.
PLITEQ INC — Type GENIECLIP

b. **Steel Framing Members* —** Used to attach furring channels to studs (Item 2). Clips spaced max. 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw with 1 in. diam washer through the center hole. Furring channels are friction fitted into clips.
STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237R

8D. **Steel Framing Members* —** (Not Shown) — (Optional on one or both sides, not shown, for single or double layer systems) — As an alternate to Item 8, furring channels and Steel Framing Members as described below:

a. **Furring Channels —** Formed of No. 25 MSG galv steel, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item 8Db. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in item 6. Not for use with type FRX-G gypsum panels and Items 5A, 5C, 5D, or 5E.

b. **Steel Framing Members* —** Used to attach furring channels to studs (Item 2). Clips spaced max. 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.
REGUPOL AMERICA — Type SonusClip

8E. **Steel Framing Members* —** (Not Shown) — (Optional on one or both sides, not shown, for single or double layer systems) — As an alternate to Item 8, resilient channels and Steel Framing Members as described below:

a. **Resilient Channels —** Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with two No. 8 15 x 1/2 in. Phillips Modified Truss screws spaced 2-1/2 in. from the center of the overlap. Gypsum board attached to resilient channels as described in Item 6. Not for use with type FRX-G gypsum panels and items 5A, 5C, 5D, or 5E.

b. **Steel Framing Members* —** Used to attach resilient channels (Item 8Ea) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Resilient channels are secured to clips with one No. 10 x 1/2 in. pan-head self-drilling screw.
KEENE BUILDING PRODUCTS CO INC — Type RC+ Assurance Clip

8F **Steel Framing Members* —** (Optional on one or both sides, not shown, for single or double layer systems) — As an alternate to Item 8, furring channels and Steel Framing Members as described below:

5A. **Gypsum Board* —** (As an alternate to Item 5 when used as the base layer on one or both sides of wall, For direct attachment only, not to be used with item 4) — Nom 5/8 in. or 3/4 in. may be used as alternate to all 5/8 in. or 3/4 in. shown in Item 5, Wallboard Protection on Each Side of Wall table. Nom 5/8 in. or 3/4 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over 20 MSG steel studs and staggered min 1 stud cavity on opposite sides of studs. See Items 1A, 2A 8, 8A(a). Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. To be used with Lead Batten Strips (see Item 12) or Lead Discs or Tabs (see Item 13).
RAY-BAR ENGINEERING CORP — Type RB-LBG

5B. **Gypsum Board* —** (As an alternate to Items 5 and 5A) — Nom 5/8 in. thick gypsum panels with square edges, applied horizontally or vertically for thel hour single layer system -when the gypsum board panels are installed horizontally the joints are to be staggered by a minimum of 12 in. on opposite sides of assembly, they are to be secured on each side of the studs with 1-1/4 in. long Type S-12 bugle head steel screws spaced 8 in. OC to the top and bottom tracks and in the field with screws 1 in. and 4 in. from the horizontal joints. When the gypsum board panels are installed vertically all vertical joints must be centered over studs and staggered min 1 stud cavity on opposite sides of studs. Gypsum board secured to studs with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC to the top and bottom tracks and in the field with screws 1 in and 4 in. from the perimeter. For 2 hour double layer system - when the gypsum board panels are installed horizontally the joints need not be staggered on opposite sides of assembly. Base layer secured on each side of the studs with 1-1/4 in. long Type S-12 bugle head steel screws spaced 16 in. OC to the top and bottom track and in the field with screws beginning 1 in. and 8 in. from the horizontal joints. Face layer horizontal joints staggered 8 in from base layer joints and secured with 1-5/8 in. long Type S-12 bugle head steel screws spaced 16 in. OC to the top and bottom tracks and in the field with screws beginning 1 in. and 8 in. from the horizontal joints. Face layer screws offset 8 in. from base layer screws. When the gypsum board panels are installed vertically all vertical joints must be centered over studs and staggered min 1 stud cavity on opposite sides of studs. Face layer gypsum boards secured to studs with 1-1/4 in. long Type S-12 steel screws spaced 16 in. OC with screws 1 in. and 8 in. from the perimeter. Base layer gypsum boards secured to studs with 1-1/4 in. long Type S-12 steel screws spaced 16 in. OC with screws 1-1/2 in and 8 in. from the perimeter. Face layer screws offset 8 in. from base layer screws.
CGC INC — Type USGX

UNITED STATES GYPSUM CO — 5/8 in. thick Type USGX (Joint tape and compound, Item 9, optional with Type USGX)

USG BORAL DRYWALL SFZ LLC — 5/8 in. thick Type USGX (Joint tape and compound, Item 9, optional with Type USGX)

USG MEXICO S A DE C V — Type USGX

12. **Lead Batten Strips —** (Not Shown, For Use With Item 5A) — Lead batten strips, min 1-1/2 in. wide, max 10 ft long with a max thickness of 0.125 in. Strips placed on the interior face of studs and attached from the exterior face of the stud with two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 5A) and optional at remaining stud locations. Required behind vertical joints.

12A. **Lead Batten Strips —** (Not Shown, for use with Item 5D) — Lead batten strips, 2 in. wide, max 10 ft long with a max thickness of 0.140 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in. long min. Type S-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.5% meeting the Federal specification QQ-L-201f, Grades "B, C or D". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 6) and optional at remaining stud locations.

13. **Lead Discs or Tabs —** (Not Shown, For Use With Item 5A) — Used in lieu of or in addition to the lead batten strips (Item 12) or optional at other locations - Max 3/4 in. diam by max 0.125 in. thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards (Item 5A) underneath screw locations prior to the installation of the screws. Lead discs or tabs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C".

13A. **Lead Discs —** (Not Shown, for use with Item 5D) — Max 5/16 in. diam by max 0.140 in. thick lead discs compression fitted or adhered over steel screw heads. Lead discs to have a purity of 99.5% meeting the Federal Specification QQ-L-201f, Grades "B, C or D".

14. **Lead Batten Strips —** (Not Shown, For Use With Item 5C) — Lead batten strips, 2 in. wide, max 10 ft long with a max thickness of 0.142 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in. long min. Type S-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 5C) and optional at remaining stud locations.

15. **Lead Tabs —** (Not Shown, For Use With Item 5C) — 2 in. wide, 5 in. long with a max thickness of 0.142 in. Tabs friction-fit around front face of stud, the stud folded back flange, and the back face of the stud. Tabs required at each location where a screw (that secures the gypsum boards, Item 5C) will penetrate the steel stud. Lead tabs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead tabs may be held in place with standard adhesive tape if necessary.

16. **Wall and Partition Facings and Accessories* —** (CLBV) (Optional, Not Shown) — For use with Item 1, Item 2 to 2C, Item 3, Item 5,Item 6, Item 7A, Item 8 and Item 9. For a maximum fire rating of 1 hour. On one side of the wall, over the first layer of Gypsum Board (Item 5), install ReflexXor membrane with the gold side facing outwards. Membrane installed with T50 staples spaced 12 inches on center in both directions as per manufacturer's instructions, seams in membrane to be overlapped by 2 inches. When ReflexXor

5C. **Gypsum Board* —** (As an alternate to Item 5 when used as the base layer on one or both sides of wall, For direct attachment only, not to be used with item 4) — Nominal 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 (or #6 by 1-1/4 in. long bugle head fine driller) steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field.
NEW ENGLAND LEAD BURNING CO INC, DBA NELCO — Nelco

5D. **Gypsum Board* —** (As an alternate to Item 5 when used as the base layer on one or both sides of wall, For direct attachment only, not to be used with item 4) — Nom 5/8 or 3/4 in. may be used as alternate to all 5/8 or 3/4 in. shown in Item 5, Wallboard Protection on Each Side of Wall table. Nom 5/8 or 3/4 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over 20 MSG steel studs and staggered min 1 stud cavity on opposite sides of studs. See Items 1A, 2A 8, 8A(a). Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. To be used with Lead Batten Strips (see Item 12A) or Lead Discs (see Item 13A).
MAYCO INDUSTRIES INC — Type X-Ray Shielded Gypsum

5E. **Gypsum Board* —** (As an alternate to Item 5 when used as the base layer on one or both sides of wall, For direct attachment only, not to be used with item 4) — Nom 5/8 in. may be used as alternate to all 5/8. shown in Item 5, Wallboard Protection on Each Side of Wall table. Nom 5/8 or 3/4 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over 20 MSG steel studs and staggered min 1 stud cavity on opposite sides of studs. See Items 1A, 2A 8, 8A(a). Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 8 ft long with a max thickness of 0.14 in. placed on the face of studs and attached to the stud with construction adhesive and two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, nominal 3/8 in. diam by max 0.085 in. thick. Compression fitted or adhered over the screw heads. Lead batten strips and discs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C".
RADIATION PROTECTION PRODUCTS INC — Type RPP - Lead Lined Drywall

5F. **Gypsum Board* —** (As an alternate to Item 5 when Foam Plastic insulation (Item 17 or 18) is used) — Any 5/8 in. thick, 4 ft. wide, Gypsum Board listed in Item 5 above. Applied vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Gypsum panels secured to studs with 1-1/4 in. long Type S steel screws spaced 8 in. OC at perimeter and in the field. For 2 layer assemblies outer layer will be attached to studs over inner layer with the 1-7/8 in. long steel screws spaced 8 in. OC.

5G. **Gypsum Board* —** (As an alternate to Item 5 when Foam Plastic insulation (Item 18A) is used) — Any 5/8 in. thick, 4 ft. wide, Gypsum Board listed in Item 5 above. Additional layer of Gypsum Board is required to what is shown in Item 5 above. Applied vertically with vertical joints centered over studs and staggered

12. **Lead Batten Strips —** (Not Shown, For Use With Item 5A) — Lead batten strips, min 1-1/2 in. wide, max 10 ft long with a max thickness of 0.125 in. Strips placed on the interior face of studs and attached from the exterior face of the stud with two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 5A) and optional at remaining stud locations. Required behind vertical joints.

12A. **Lead Batten Strips —** (Not Shown, for use with Item 5D) — Lead batten strips, 2 in. wide, max 10 ft long with a max thickness of 0.140 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in. long min. Type S-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.5% meeting the Federal specification QQ-L-201f, Grades "B, C or D". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 6) and optional at remaining stud locations.

13. **Lead Discs or Tabs —** (Not Shown, For Use With Item 5A) — Used in lieu of or in addition to the lead batten strips (Item 12) or optional at other locations - Max 3/4 in. diam by max 0.125 in. thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards (Item 5A) underneath screw locations prior to the installation of the screws. Lead discs or tabs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C".

13A. **Lead Discs —** (Not Shown, for use with Item 5D) — Max 5/16 in. diam by max 0.140 in. thick lead discs compression fitted or adhered over steel screw heads. Lead discs to have a purity of 99.5% meeting the Federal Specification QQ-L-201f, Grades "B, C or D".

14. **Lead Batten Strips —** (Not Shown, For Use With Item 5C) — Lead batten strips, 2 in. wide, max 10 ft long with a max thickness of 0.142 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in. long min. Type S-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 5C) and optional at remaining stud locations.

15. **Lead Tabs —** (Not Shown, For Use With Item 5C) — 2 in. wide, 5 in. long with a max thickness of 0.142 in. Tabs friction-fit around front face of stud, the stud folded back flange, and the back face of the stud. Tabs required at each location where a screw (that secures the gypsum boards, Item 5C) will penetrate the steel stud. Lead tabs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead tabs may be held in place with standard adhesive tape if necessary.

16. **Wall and Partition Facings and Accessories* —** (CLBV) (Optional, Not Shown) — For use with Item 1, Item 2 to 2C, Item 3, Item 5,Item 6, Item 7A, Item 8 and Item 9. For a maximum fire rating of 1 hour. On one side of the wall, over the first layer of Gypsum Board (Item 5), install ReflexXor membrane with the gold side facing outwards. Membrane installed with T50 staples spaced 12 inches on center in both directions as per manufacturer's instructions, seams in membrane to be overlapped by 2 inches. When ReflexXor

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228 Commerce Blvd.
Statesville, NC 28625
Limited Engineering License # D-0140

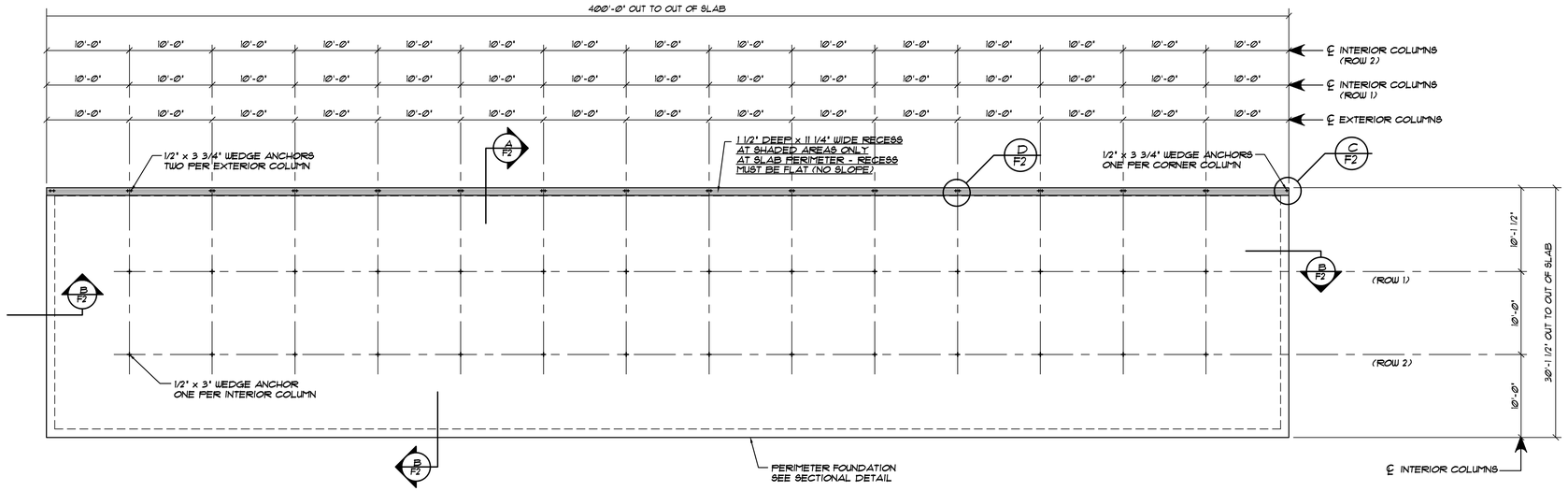
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027355 REED N SELF
7/27/2026

REVISIONS	DATE	BY

DATE: 7/20/26
DRAWN BY: CWM
SCALE: AS NOTED
APPROVED BY:

BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800) 654-7813

PROJECT NAME: LAKESIDE STORAGE
PROJECT ADDRESS: ANGIER, NORTH CAROLINA
OWNER: IS NIELLS CREEK, LLC.
PROJECT NO.: NC26153-G
SHEET TITLE: UL # 423 BUILDING "G"
DRAWING NUMBER: CS3 OF 4



FOUNDATION PLAN . . . BUILDING "G"

SCALE: 1/8" = 1'-0"

SAW CUT CONTROL JOINTS IN SLAB SURFACE AT APPROXIMATELY 10'–0" INTERVALS . . .
OFFSET CUTS 2'–6" MINIMUM FROM INTERIOR COLUMN LINES.

ACI 318 – TABLE 19.3.1.1
EXPOSURE CATEGORIES AND CLASSES

CATEGORY	SEVERITY	CLASS	CONDITION	
F FREEZING AND THAWING	NOT APPLICABLE	F0	CONCRETE NOT EXPOSED TO FREEZING–AND–THAWING CYCLES	
S SULFATE			WATER–SOLUBLE SULFATE (SO_4) IN SOIL, PERCENT BY WEIGHT	DISSOLVED SULFATE (SO_4) IN WATER, ppm
	NOT APPLICABLE	S0	SO_4 < 0.10	SO_4 < 150
W REQUIRING LOW PERMEABILITY	NOT APPLICABLE	W0	CONCRETE DRY IN SERVICE, CONCRETE IN CONTACT WITH WATER AND LOW PERMEABILITY IS NOT REQUIRED	
C CORROSION PROTECTION OF REINFORCEMENT	MODERATE	C1	CONCRETE EXPOSED TO MOISTURE BUT NOT TO EXTERNAL SOURCES OF CHLORIDES	

NOTE: ABOVE REPRESENTS "ASSUMED" CONDITIONS BY ENGINEER. IF CONTRACTOR KNOWS OR HAS REASON TO BELIEVE OTHERWISE, ENGINEER SHALL BE NOTIFIED IN WRITING PRIOR TO CONSTRUCTION.

REFERENCE ACI 318–14 – TABLE 19.3.1.1 FOR REQUIREMENTS FOR CONCRETE BY EXPOSURE CLASS.

NOTE: . . . SEE OWNER FOR BUILDING ORIENTATION ON SITE

NOTE:
WEDGE ANCHORS ARE PROVIDED BY BETCO. EMBEDDED ANCHOR BOLTS IN SLAB ARE NOT REQUIRED BY BUYER.

NOTE TO OWNER / CONTRACTOR:
DO NOT CUT SAW JOINTS ALONG COLUMN LINES. DOING SO WILL REDUCE THE STRUCTURAL CAPACITY OF THE BUILDING ANCHORAGE TO THE CONCRETE AND MAY RESULT IN ADDITIONAL MATERIAL AND LABOR CHARGES. SAW CUTS MUST BE OFFSET 2'-6" MINIMUM FROM COLUMN LINES.

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027355 REED N SELF 7/27/2026

REVISIONS	DATE	BY

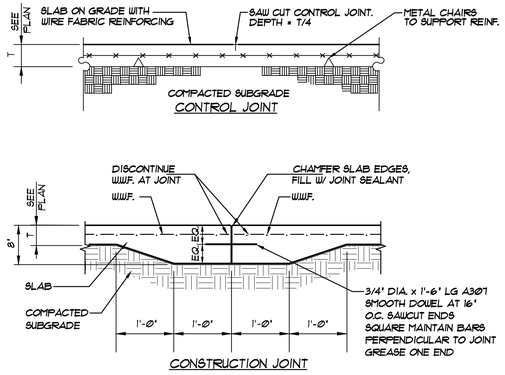
DATE: 7/20/26
DRAWN BY: CWM
SCALE: AS NOTED
APPROVED BY:

BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800) 654–7813

BETCO, Inc.
228 Commerce Blvd.
Statesville, NC 28625
Limited Engineering License # D-0140

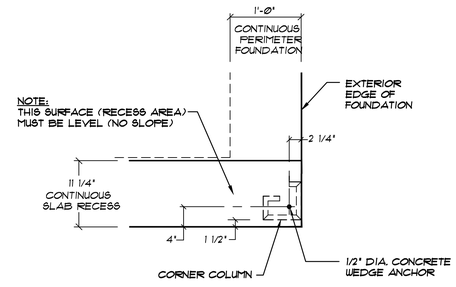
PROJECT NAME: LAKESIDE STORAGE
PROJECT ADDRESS: ANGIER, NORTH CAROLINA
OWNER: IS NIELLS CREEK, LLC.
PROJECT NO.: NC6153 – G
SHEET TITLE: FOUNDATION PLAN & NOTES BUILDING "G"
DRAWING NUMBER: F1 OF 2

RELEASE FOR CONSTRUCTION DATE 7/27/2026



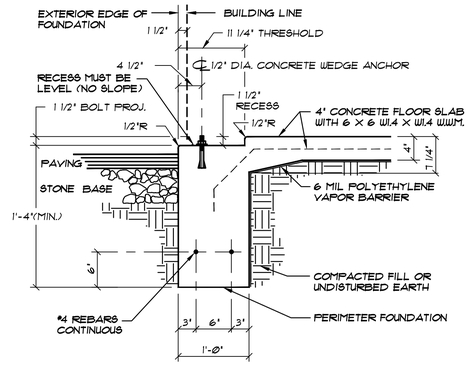
E / F2 **CONTROL JOINT & CONSTRUCTION JOINT IN CONCRETE SLAB**

NOT TO SCALE



C / F2 **CORNER WEDGE ANCHORS AT STUD WALL**

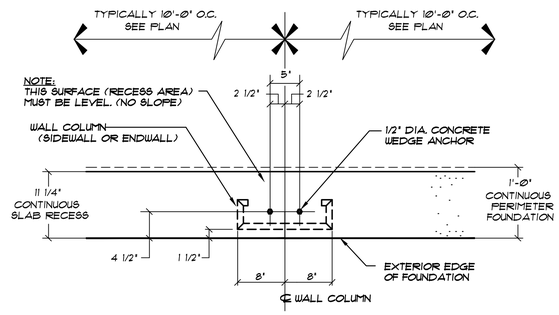
NOT TO SCALE



A / F2 **TYPICAL PERIMETER FOUNDATION SECTION**

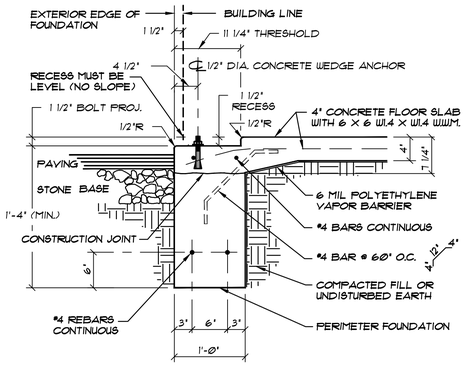
(MONOLITHIC CONCRETE PLACEMENT)

NOT TO SCALE



D / F2 **TYPICAL WALL COLUMN WEDGE ANCHORS**

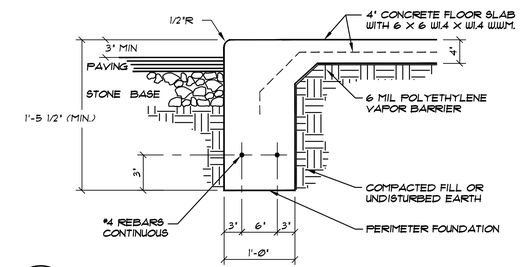
NOT TO SCALE



A / F2 **ALTERNATE PERIMETER FOUNDATION SECTION**

(TWO STAGE CONCRETE PLACEMENT)

NOT TO SCALE



B / F2 **PERIMETER FOUNDATION SECTION AT EXTERIOR STUDWALL**

(MONOLITHIC CONCRETE PLACEMENT)

NOT TO SCALE

RELEASE FOR CONSTRUCTION DATE 7/27/2026

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228 Commerce Blvd.
Statesville, NC 28625
Limited Engineering License # D-0140

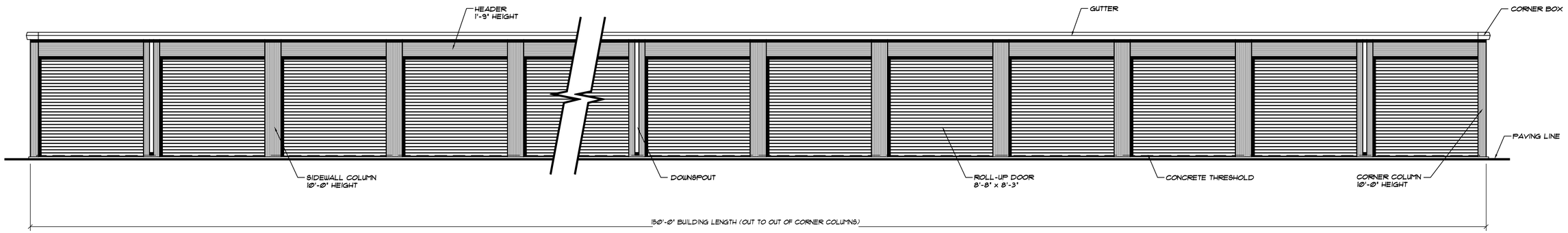
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027355 REED N SELF 7/27/2026

REVISIONS	DATE	BY

DATE: 7/20/26
DRAWN BY: CWM
SCALE: AS NOTED
APPROVED BY:

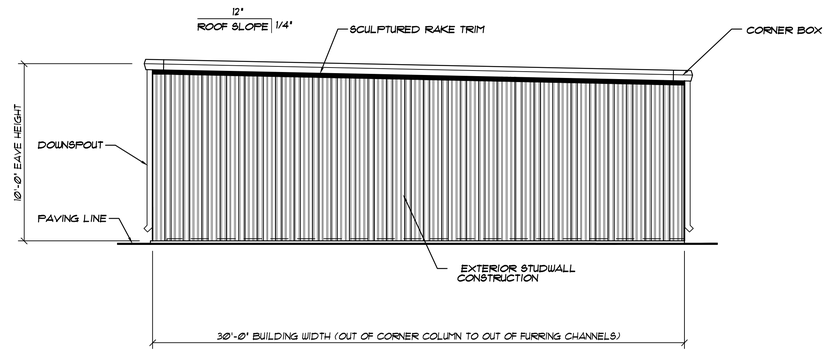
BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800) 654-7813

PROJECT NAME: LAKESIDE STORAGE
PROJECT ADDRESS: ANGIER, NORTH CAROLINA
OWNER: IS NIELLS CREEK, LLC.
PROJECT NO.: NC26153 - G
SHEET TITLE: FOUNDATION DETAILS BUILDING "G"
DRAWING NUMBER: F2 OF 2



A/S1 SIDEWALL ELEVATION . . . BUILDING "G"

SCALE: 1/4" = 1'-0"



B/S1 ENDWALL ELEVATION . . . BUILDING "G"

SCALE: 1/4" = 1'-0"

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Statesville, NC 28625
Limited Engineering License # D-0140

NOTE: . . . SEE OWNER FOR BUILDING ORIENTATION ON SITE

NOTE:
DOWNSPOUTS LOCATIONS SHOWN FOR ELEVATION PURPOSE ONLY. REFER TO FLOOR PLAN SHEETS FOR LOCATIONS

NORTH CAROLINA PROFESSIONAL SEAL 027355 ENGINEER REED N SELF 7/27/2026

REVISIONS	DATE	BY

DATE: 7/20/26
DRAWN BY: CWM
SCALE: AS NOTED
APPROVED BY:

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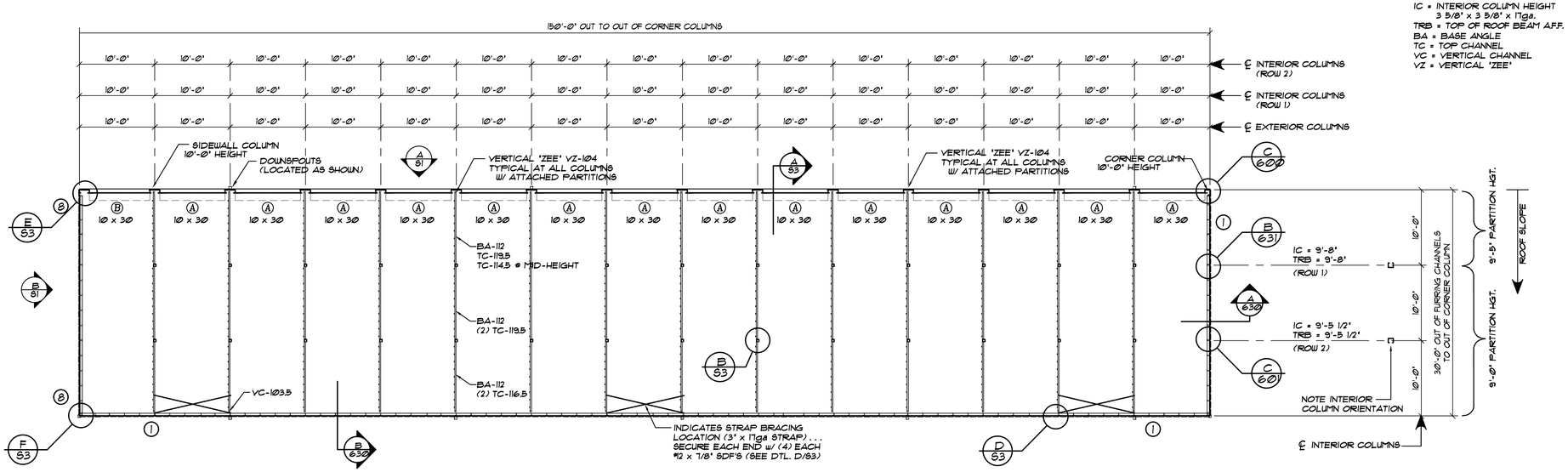
PROJECT NAME: LAKESIDE STORAGE
PROJECT ADDRESS: ANGIER, NORTH CAROLINA
OWNER: IS NIELLS CREEK, LLC.
PROJECT NO.: NC26153 - G
SHEET TITLE: ELEVATIONS & NOTES BUILDING "G"
DRAWING NUMBER: S1 OF 3

RELEASE FOR CONSTRUCTION DATE 7/27/2026



IC = INTERIOR COLUMN HEIGHT
3 5/8" x 3 5/8" x 17ga.
TRB = TOP OF ROOF BEAM A.F.F.
BA = BASE ANGLE
TC = TOP CHANNEL
VC = VERTICAL CHANNEL
VZ = VERTICAL 'ZEE'

FLOOR PLAN . . . BUILDING "G"

SCALE: 1/8" = 1'-0"

NOTE: BUILDING "G" IS PROVIDED W/(2) ADJUSTABLE CONTROL JOINT COLUMNS. 10'-0" HEIGHT

STUDWALL LEGEND	BUILDING # G	
INTERIOR STUDWALL	EXTERIOR STUDWALL	
DESCRIPTION	UNINSULATED	INSULATED
(1) EXTERIOR STUDWALL CONSTRUCTION AT FLAT SLAB (BLOCK @ MID-HGT.)	180 L.F.	0 L.F.
(B) 1 HOUR EXTERIOR STUDWALL CONSTRUCTION AT FLAT SLAB (BLOCK @ MID-HGT.) (UL #U423, SEE CS4 FOR CONSTRUCTION)	30 L.F.	0 L.F.

NOTE #1: SEE ERC610X FOR COMPLETE STUDWALL CONSTRUCTION DETAILS.

DOOR SCHEDULE		
ID	DOOR SIZE	TYPE
(A)	8'-8" x 8'-3"	EXTERIOR ROLL-UP
(B)	8'-0" x 8'-3"	EXTERIOR ROLL-UP

NOTE:
UNIT SIZES SHOWN ARE NOMINAL. ACTUAL CLEAR DIMENSIONS INSIDE UNITS MAY VARY ACCORDING TO FINAL DESIGN OF COMPONENTS.

NOTE: BLOCK ALL LOAD-BEARING INTERIOR & EXTERIOR STUD WALLS AS SHOWN IN DETAIL A OF ERC631X

NOTE: . . . SEE OWNER FOR BUILDING ORIENTATION ON SITE

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027355 REED N SELF 7/27/2026

REVISIONS	DATE	BY

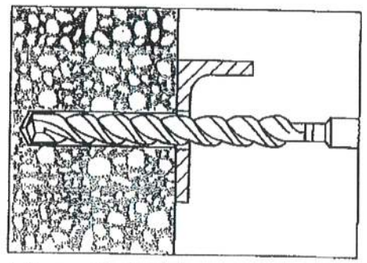
DATE: 7/20/26
DRAWN BY: CWM
SCALE: AS NOTED
APPROVED BY:

BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800) 654-7813

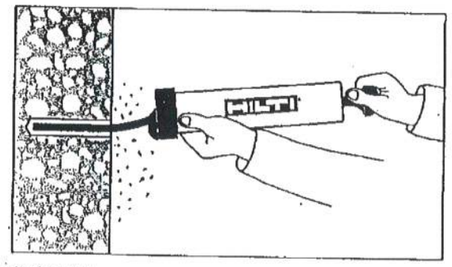
PROJECT NAME: LAKESIDE STORAGE
PROJECT ADDRESS: ANGIER, NORTH CAROLINA
OWNER: IS NIELLS CREEK, LLC.
PROJECT NO.: NC26153 - G
SHEET TITLE: FLOOR PLAN & NOTES BUILDING "G"
DRAWING NUMBER: S2 OF 3

BETCO, Inc.
228 Commerce Blvd.
Statesville, NC 28625
Limited Engineering License # D-0140

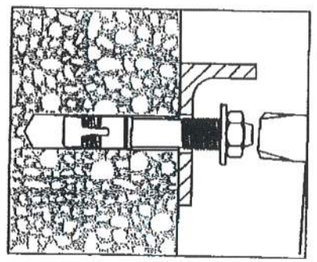
Kwik Bolt 3 Expansion Anchor Installation Instructions



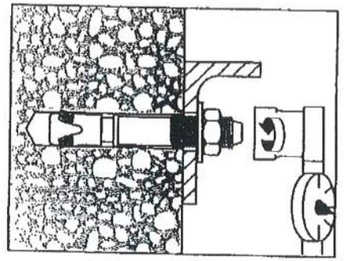
1. Hammer drill a hole to the same nominal diameter as the Kwik Bolt 3. The hole depth must exceed the anchor embedment by at least one diameter. The fixture may be used as a drilling template to ensure proper anchor location.



2. Clean hole.



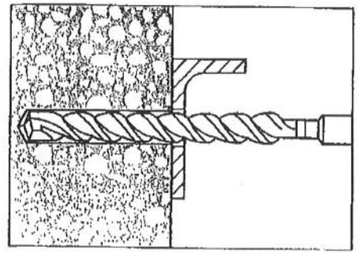
3. Drive the Kwik Bolt 3 into the hole using a hammer. The anchor must be driven until at least six threads are below the surface of the fixture.



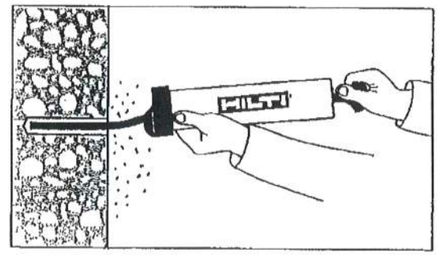
4. Tighten the nut to the recommended installation torque.

DESIGN INFORMATION	Units	Nominal Anchor Diameter				
		1/4	3/8	1/2	5/8	3/4
Installation torque	ft*lb	4	20	40	60	110
	(Nm)	(5)	(27)	(54)	(81)	(149)

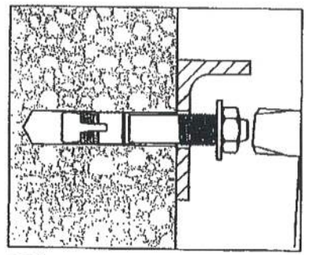
Kwik Bolt TZ Anchor Installation Instructions into normal-weight and lightweight concrete



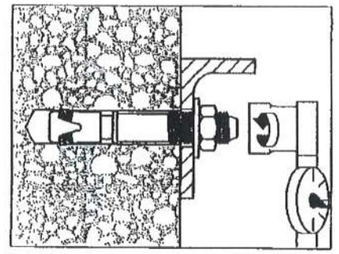
1. Hammer drill a hole to the same nominal diameter as the Kwik Bolt TZ. The hole depth must exceed the anchor embedment by at least 1/4 inch. The fixture may be used as a drilling template to ensure proper anchor location.



2. Clean hole.



3. Drive the Kwik Bolt TZ into the hole using a hammer. The anchor must be driven until at least 4 threads are below the surface of the fixture.



4. Tighten the nut to the recommended installation torque.

SETTING INFORMATION	Units	Nominal anchor diameter (in.)			
		3/8	1/2	5/8	3/4
Installation torque	ft-lb	25	40	60	110
	(Nm)	(34)	(54)	(81)	(149)

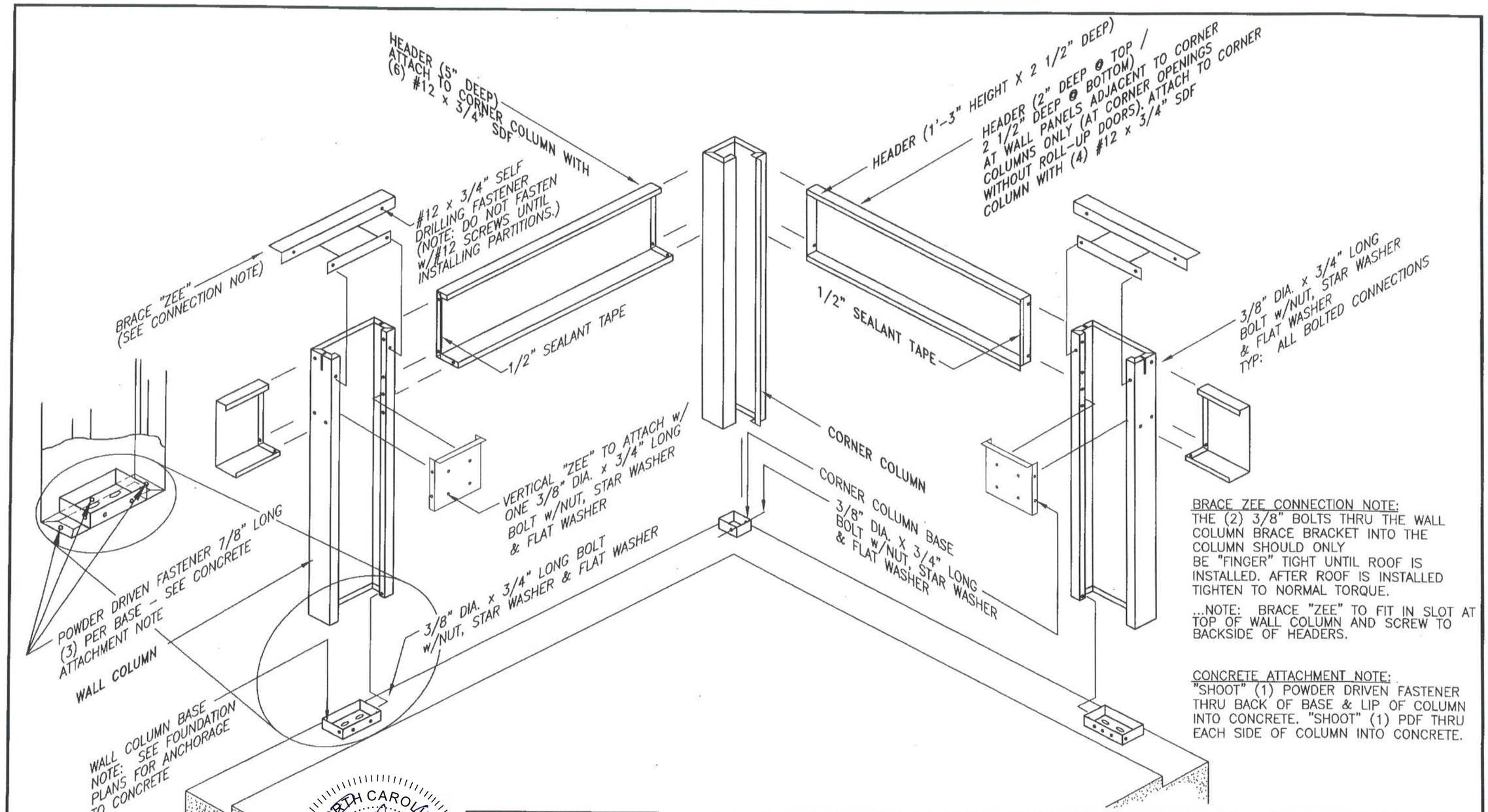
NORTH CAROLINA PROFESSIONAL SEAL 027355 ENGINEER REED N SELF

7/27/2026

REVISIONS	DATE	BY

BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800)654-7813

SHEET TITLE: Kwik Bolt Anchor Installation Instructions		
DRAWN BY: BDL	APPROVED BY:	DRAWING NUMBER: ERC016X
SCALE: NTS	DATE: 11/8/2011	



BRACE ZEE CONNECTION NOTE:
THE (2) 3/8" BOLTS THRU THE WALL COLUMN BRACE BRACKET INTO THE COLUMN SHOULD ONLY BE "FINGER" TIGHT UNTIL ROOF IS INSTALLED. AFTER ROOF IS INSTALLED TIGHTEN TO NORMAL TORQUE.

...NOTE: BRACE "ZEE" TO FIT IN SLOT AT TOP OF WALL COLUMN AND SCREW TO BACKSIDE OF HEADERS.

CONCRETE ATTACHMENT NOTE:
"SHOOT" (1) POWDER DRIVEN FASTENER THRU BACK OF BASE & LIP OF COLUMN INTO CONCRETE. "SHOOT" (1) PDF THRU EACH SIDE OF COLUMN INTO CONCRETE.

NORTH CAROLINA PROFESSIONAL SEAL 027355 ENGINEER REED N SELF
7/27/2026

REVISIONS	DATE	BY

BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800)654-7813

SHEET TITLE:
PERIMETER WALL ASSEMBLY
All Eave Heights

DRAWN BY:	APPROVED BY:	DRAWING NUMBER:
J Pope		ERC100X
SCALE: NTS	DATE: 6/17/94	

CONTROL JOINT BRACE (S20139)
ATTACH TO HEADERS w/(2)
#12 x 7/8" SDF AT EACH HEADER
(TOTAL OF 4 SCREWS)
...FIELD NOTCH IF NECESSARY TO FIT OVER
CONTROL JOINT COLUMN...SEE ISOMETRIC
VIEW BELOW...NOTE: LOCATION OF NOTCHES
TO BE DETERMINED FROM WIDTH OF C.J. COLUMN

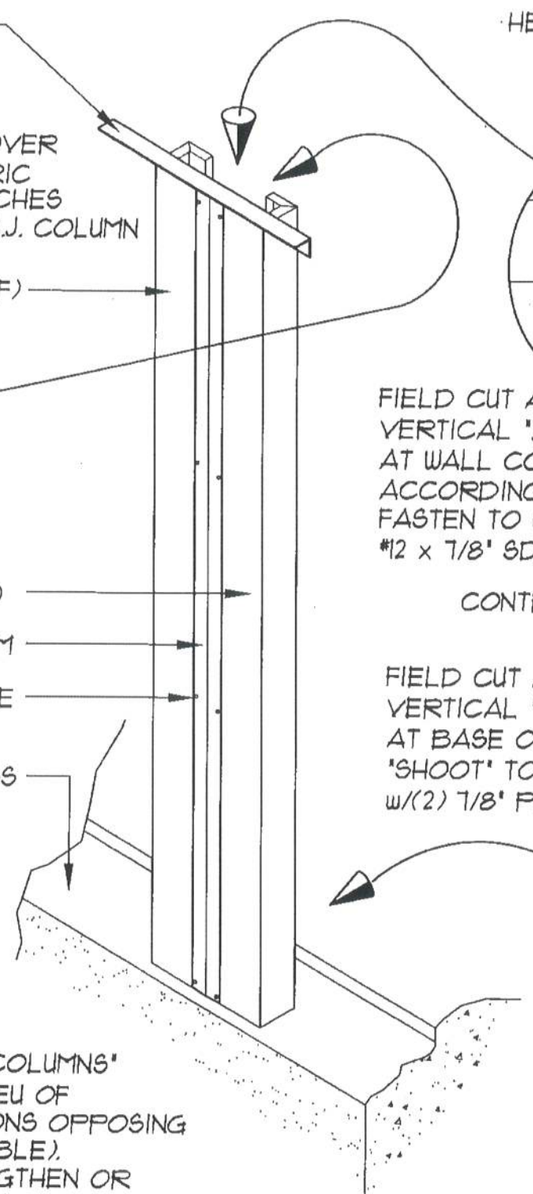
CONTROL JOINT COLUMN (HALF)

CONTROL JOINT COLUMN (HALF)

C.J. COLUMN EXPANSION TRIM

#10 x 5/8" SDF (PP) (8) EACH SIDE

SLAB RECESS



HEADER

SEALANT TAPE
1/8" thick x 1/2" wide

C.J.C. EXPANSION TRIM

7/8" PDF (2) EA. SIDE

#10 x 5/8" SDF (PP)
(4) EACH SIDE

CONTROL JOINT BRACE
FOR ROOF PAN
ATTACHMENT AT TOP OF
COLUMN . . . FASTEN TO
HEADER WITH #12 x 7/8"
SDF EACH END
(SEE ISOMETRIC VIEW)

#12 x 7/8" SDF

3/8" DIA. x 3/4" LG. BOLT,
NUT, FLAT WASHER &
STAR WASHER

FIELD CUT ANGLE SA-2 FOR
VERTICAL "ZEE" ATTACHMENT
AT WALL COLUMNS. . .POSITION
ACCORDING TO "YZ" LENGTH
FASTEN TO C.J. COLUMN w/(2)
#12 x 7/8" SDF EA. END. . .

CONTROL JOINT COLUMN (HALF)

CONTROL JOINT COLUMN (HALF)

FIELD CUT ANGLE SA-2 FOR
VERTICAL "ZEE" ATTACHMENT
AT BASE OF COLUMN. . .
"SHOOT" TO FOUNDATION
w/(2) 7/8" PDF. . .

C.J.C. EXPANSION TRIM
BRACKET...(2) REQUIRED...
(1) AT 1/3 OF COLUMN HGT.
& (1) AT 2/3 OF COLUMN HGT.

#12 x 7/8" SDF
(2) PER BRACKET

#12 x 7/8" SDF
(4) PER ANGLE

1/2" DIA. x 3 3/4" LG.
WEDGE ANCHOR

NOTE: ADJUSTABLE "CONTROL JOINT COLUMNS" (C.J.C.'s) ARE TO BE USED IN LIEU OF SIDEWALL COLUMNS IN LOCATIONS OPPOSING EACH OTHER (WHERE APPLICABLE). THE C.J.C.'S ALLOW YOU TO LENGTHEN OR SHORTEN THE OVERALL LENGTH OF THE BLDG. BY UP TO 2". THIS GIVES YOU THE ABILITY TO MAKE ADJUSTMENTS FOR A SLAB THAT IS NOT EXACTLY THE DIMENSIONS SPECIFIED.

DO NOT INSTALL WEDGE ANCHORS IN C.J.C. LOCATIONS UNTIL COLUMNS ARE IN PLACE & ADJUSTED AS REQUIRED.

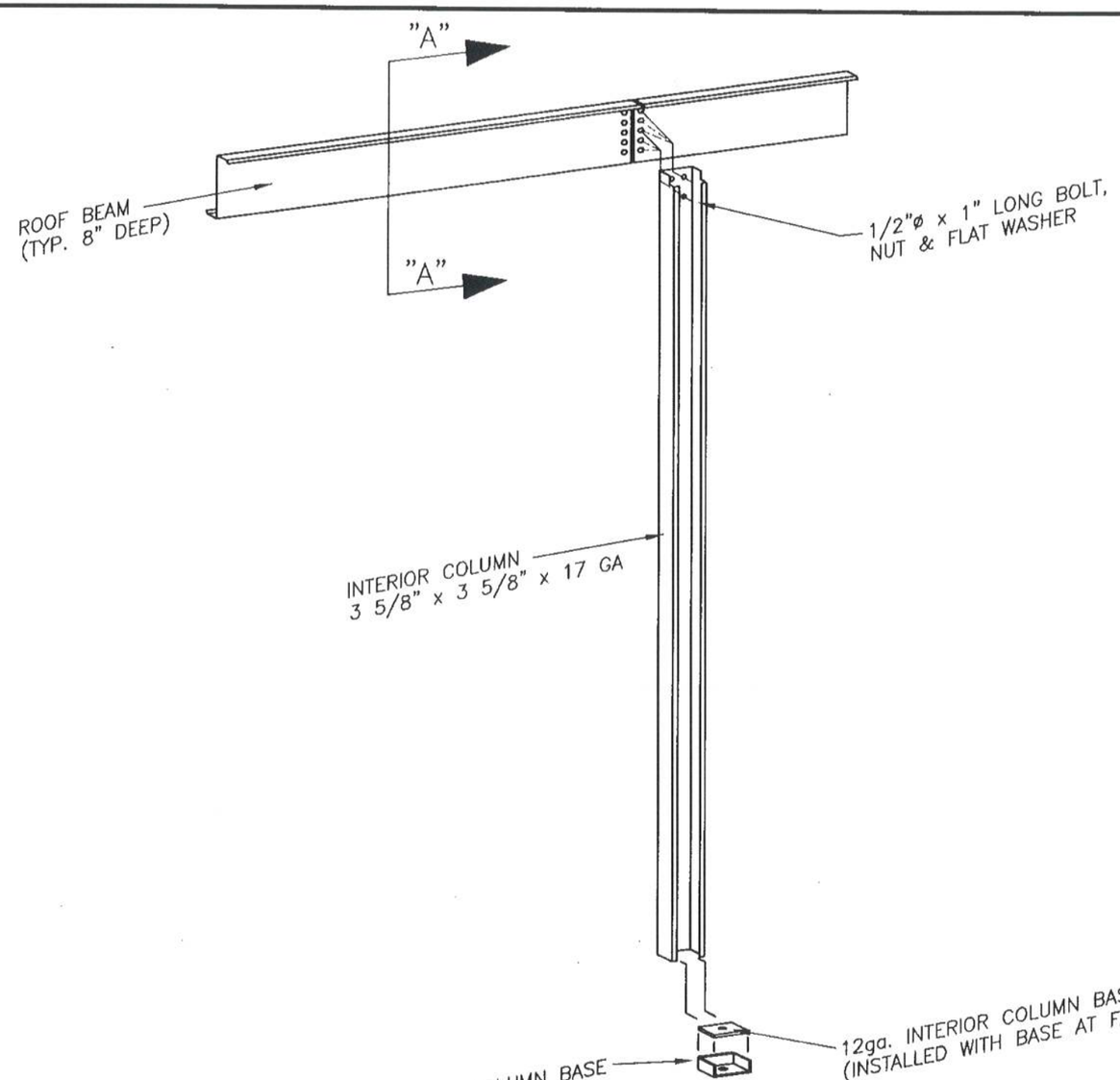
REVISIONS	DATE	BY
4 ADDED SDF'S TO CJC TRIM	11/15/05	JCM
3 CHANGED W/A LENGTH TO 3 3/4"	4/30/03	RSG
2 GENERAL REVISIONS	1/22/99	JAB
1 GENERAL REVISIONS	3-8-99	FOX

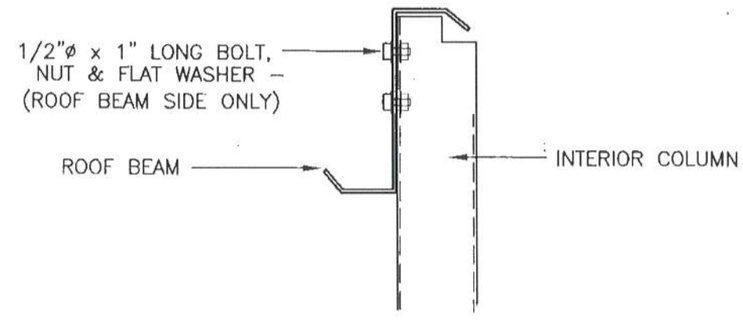
BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800)654-7813

SHEET TITLE:
CONTROL JOINT COLUMN AND TRIM INSTALLATION

DRAWN BY:	APPROVED BY:	DRAWING NUMBER:
K.D.W.		ERC105X
SCALE: NTS	DATE: 8/1/94	

NORTH CAROLINA PROFESSIONAL SEAL 027355 ENGINEER REED N SELF
7/27/2026





SECTION
"A" – "A"

NOTE: SEE BUILDING CROSS SECTION FOR COLUMN HEIGHT & ROOF BEAM HGT. ABOVE FINISHED FLOOR

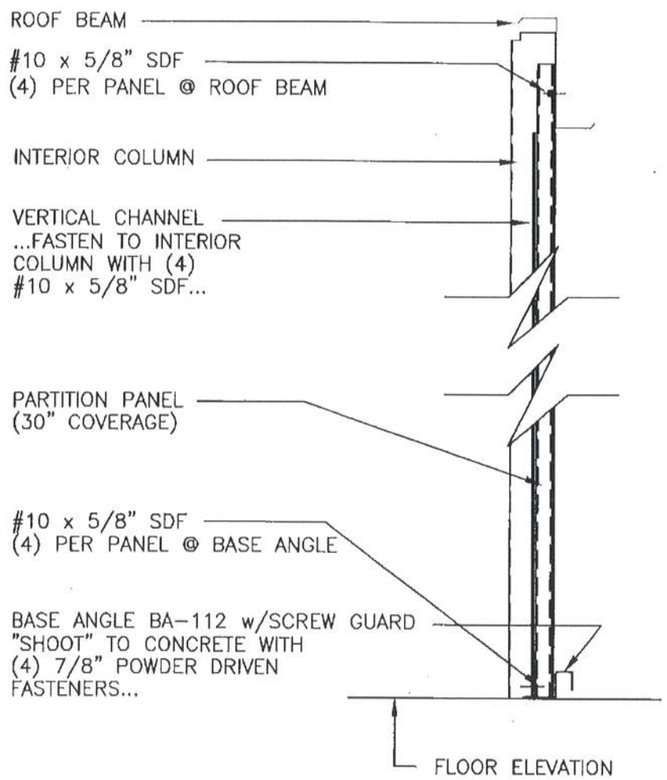
NORTH CAROLINA PROFESSIONAL SEAL 027355 ENGINEER REED N SELF
7/27/2026

	REVISIONS	DATE	BY
3	REVISED COLUMN SIZE	8-29-02	BAM
2	DETAIL REVISIONS	3-16-99	FOX
1	GENERAL REVISIONS	3-9-99	FOX

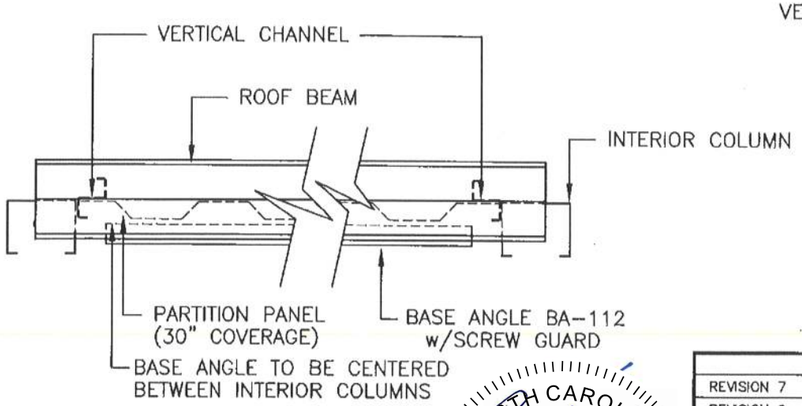
BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800)654-7813

SHEET TITLE: *Interior Column Installation All Heights*

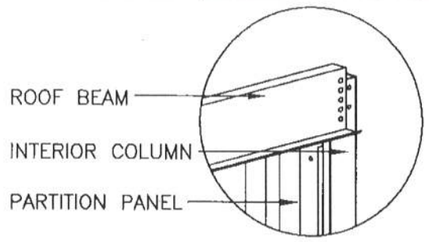
DRAWN BY:	APPROVED BY:	DRAWING NUMBER:
J POPE		ERC110X
SCALE: NTS	DATE: 1/30/98	



SECTION A–A



PLAN VIEW

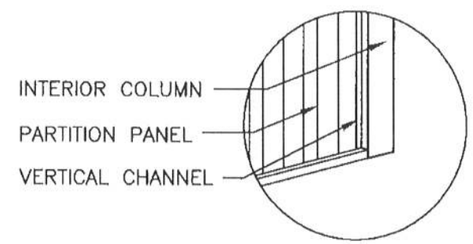


OPPOSITE VIEW THIS CORNER

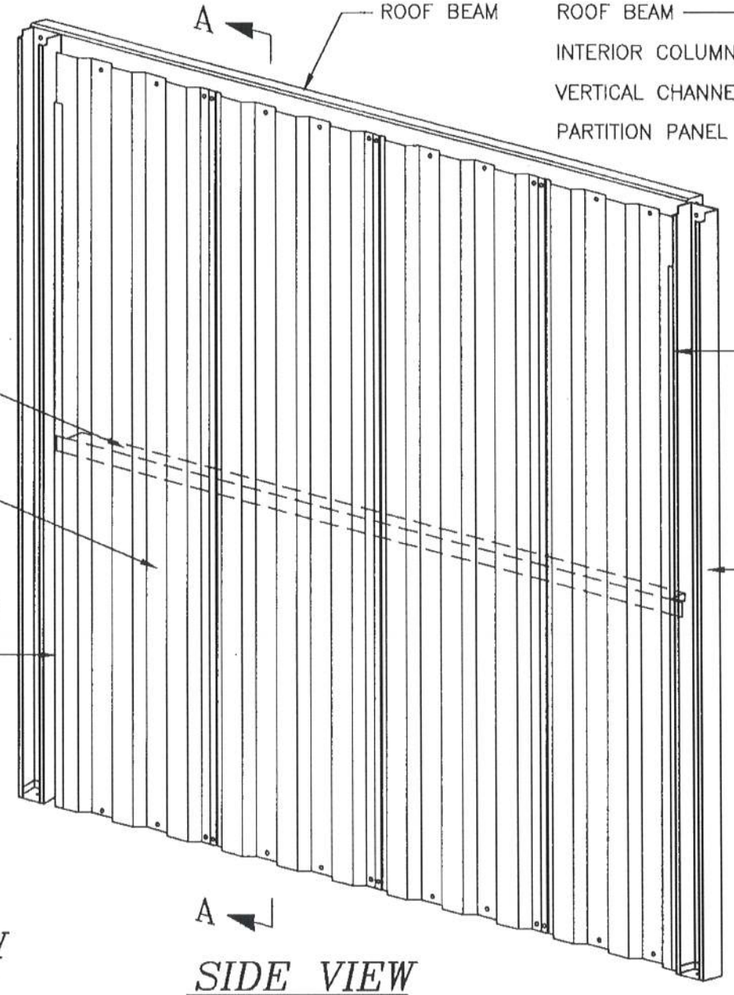
(NOTE: INSTALL A TOP CHANNEL AT 4–6" A.F.F. ONLY WHEN PANEL HEIGHT IS 9'–0" OR MORE.) (INSTALL FLANGES DOWN)

PARTITION PANEL (30" COVERAGE) FASTEN TO ROOF BEAM AND BASE ANGLE w/(4) #10 x 5/8" SDF EACH...(1) PER PAN SECTION AND (1) EACH SIDE OF LAP JOINT... ...FASTEN TO VERTICAL FRAMING w/(4) #10 x 5/8" SDF EACH – (SEE NOTE)

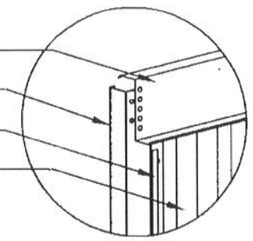
VERTICAL CHANNEL



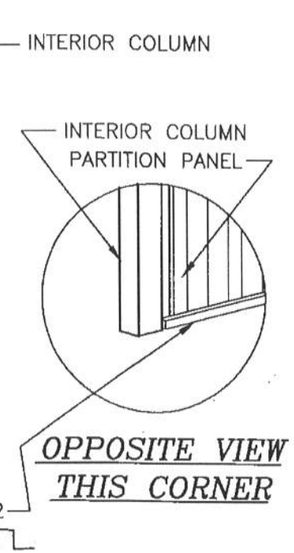
OPPOSITE VIEW THIS CORNER



SIDE VIEW



OPPOSITE VIEW THIS CORNER



OPPOSITE VIEW THIS CORNER

NOTE:
THE FOUR (4) FASTENERS FOR ATTACHING PARTITION PANELS TO INTERIOR COLUMNS ARE INSTALLED AT THE TOP, BOTTOM AND AT THE 1/3 POINTS NOT TO EXCEED A 3'–0" VERTICAL SPACING BETWEEN FASTENERS.

REVISIONS		DATE	BY
REVISION 7	REVISED DIRECTION OF MID TOP CHANNEL	3/17/04	JCM
REVISION 6	REVISED INTERIOR COLUMNS	8/29/02	BAM
REVISION 5	ADDED TOP CHANNEL AT PANELS OVER 9'–0"	2/7/02	BDL
REVISION 4	ADDED NOTE FOR INTERIOR COLUMNS	3/30/01	TLR
REVISION 3	GENERAL REVISIONS	3–24–99	FOX
REVISION 2	CORRECT VC	6/23/98	CJG
REVISION 1		6/4/98	KLH

NORTH CAROLINA PROFESSIONAL SEAL 027355 ENGINEER REED N SELF
7/27/2026

BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800)654–7813

SHEET TITLE:
Partition – Interior Column to Interior Column

DRAWN BY:	APPROVED BY:	DRAWING NUMBER:
J Pope		ERC201X
SCALE: NTS	DATE: 6/20/94	

BRACE "ZEE"
...FASTEN TO WALL COLUMN w/(1) 3/8"ø x 3/4" BOLT, NUT, STAR WASHER & FLAT WASHER EACH FLANGE...FASTEN TO HEADER w/(1) #12 x 7/8" SDF...

TOP CHANNEL TC-119.5
SECURE TO TOP OF DOOR MOUNTING PLATE w/(1) #10 x 5/8" SDF...FASTEN TO INT. COLUMN w/(2) #10 x 5/8" SDF...

#10 x 5/8" SDF
(4) PER PANEL @ TOP CHANNEL

DOOR MOUNTING PLATE
...FASTEN TO WALL COLUMN w/(2) 3/8"ø x 3/4" BOLT, NUT, STAR WASHER & FLAT WASHER EACH FLANGE

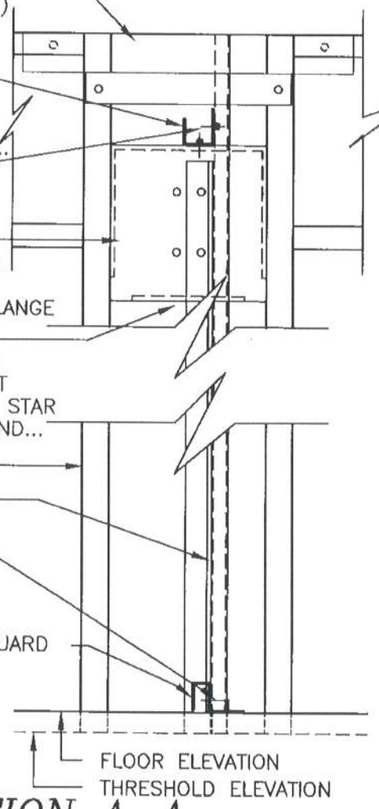
VERTICAL "ZEE"
...FASTEN TO WALL COLUMN BASE AND TO DOOR MOUNTING BRACKET w/(1) 3/8"ø x 3/4" BOLT, NUT, STAR WASHER & FLAT WASHER EACH END...

WALL COLUMN

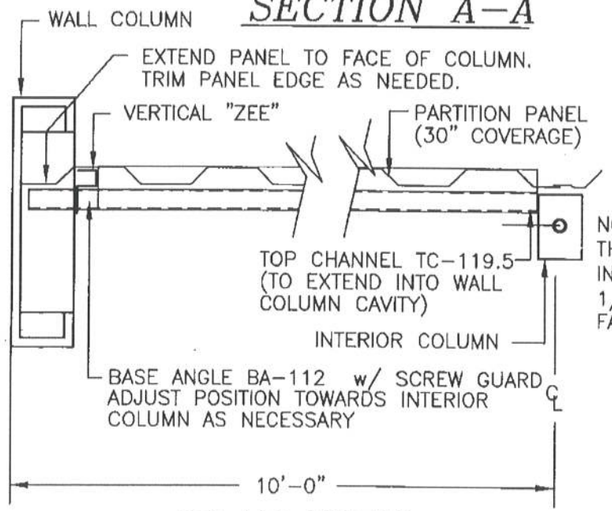
PARTITION PANEL
(30" COVERAGE)

#10 x 5/8" SDF
(4) PER PANEL @ BASE ANGLE

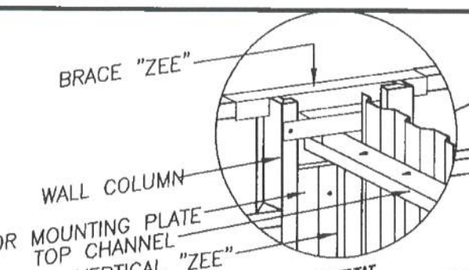
BASE ANGLE BA-112 w/SCREW GUARD "SHOOT" TO FOUNDATION w/(4) 7/8" POWDER DRIVEN FASTENERS...



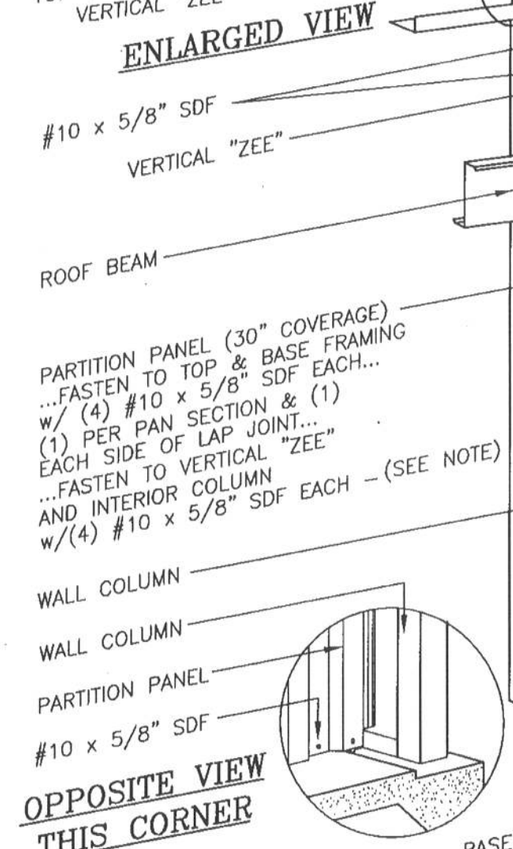
SECTION A-A



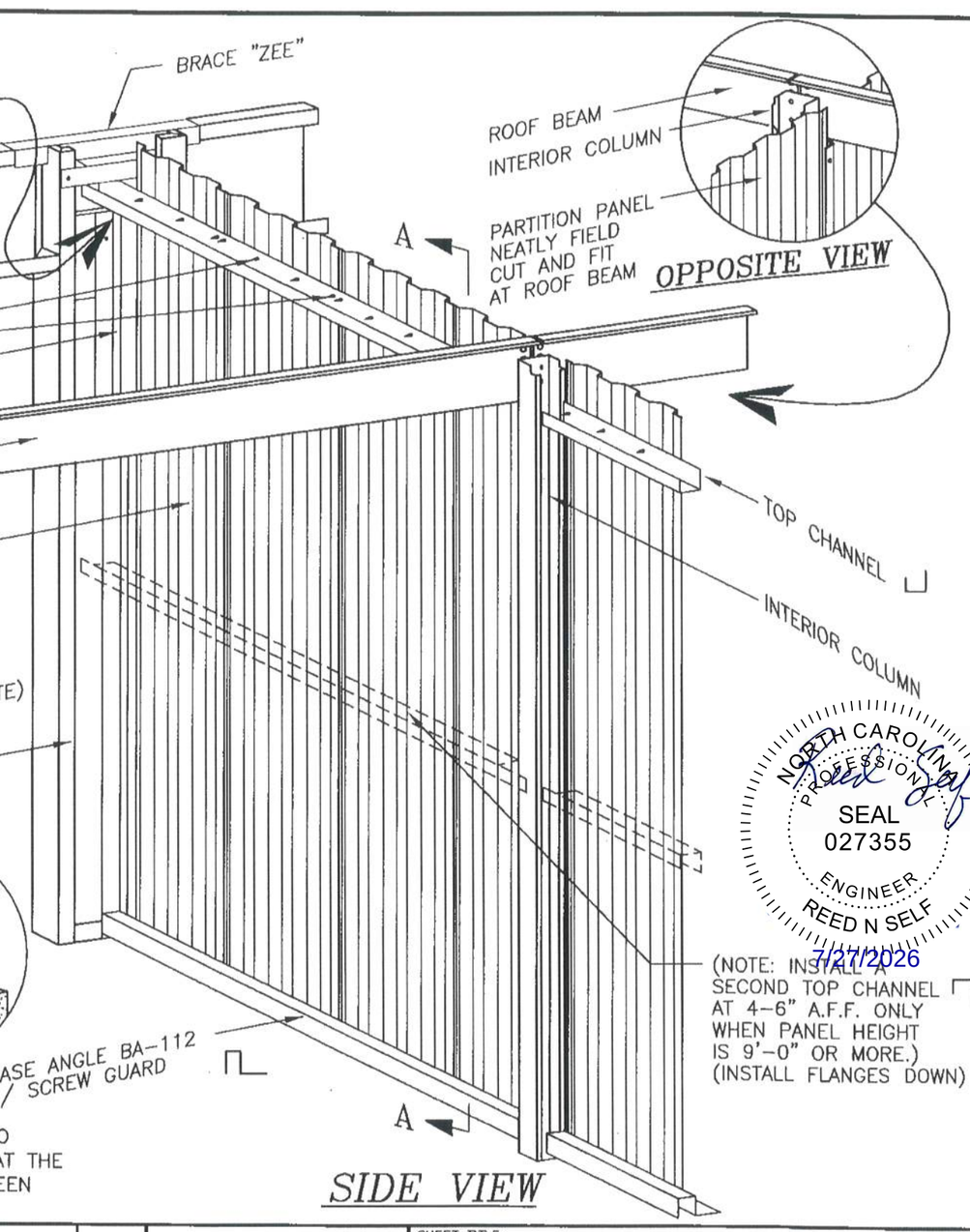
PLAN VIEW



ENLARGED VIEW



OPPOSITE VIEW THIS CORNER



OPPOSITE VIEW

SIDE VIEW

NOTE:
THE FOUR (4) FASTENERS FOR ATTACHING PARTITION PANELS TO INTERIOR COLUMNS ARE INSTALLED AT THE TOP, BOTTOM AND AT THE 1/3 POINTS NOT TO EXCEED A 3'-0" VERTICAL SPACING BETWEEN FASTENERS.

REVISIONS	DATE	BY
REVISED DIRECTION OF MID TOP CHANNEL	3/17/04	JCM
REVISED INTERIOR COLUMNS	8/29/02	BAM
ADDED TOP CHANNEL AT PANELS OVER 9'-0"	2/7/02	BDL
ADDED NOTE FOR INTERIOR COLUMNS	4/2/01	TLR
GENERAL REVISIONS	4/12/99	CWM

BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800)654-7813

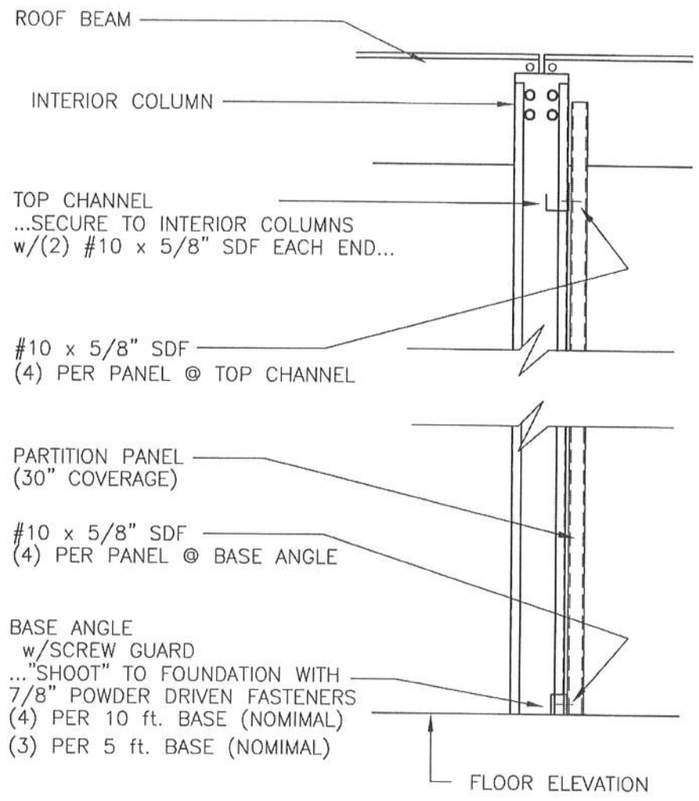
SHEET TITLE:
Partition - Sidewall Column to Interior Column - 10' span

DRAWN BY:	APPROVED BY:	DRAWING NUMBER:
J Pope		ERC202X
SCALE: NTS	DATE: 6/20/94	

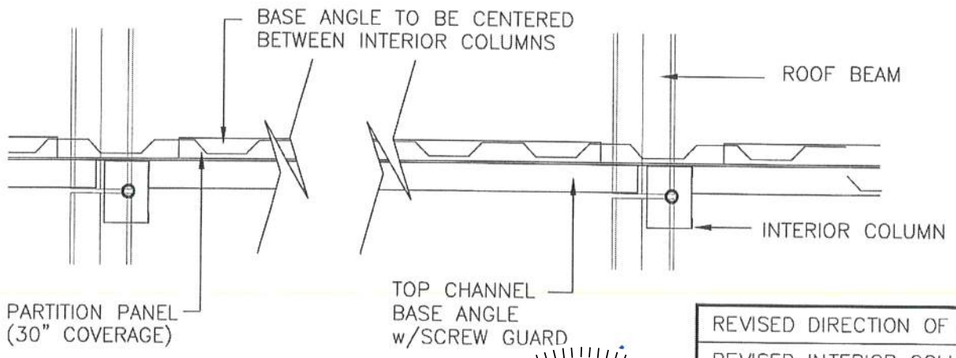
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027355 REED N SELF 7/27/2026

CONSTRUCTION DATE 7/27/2026

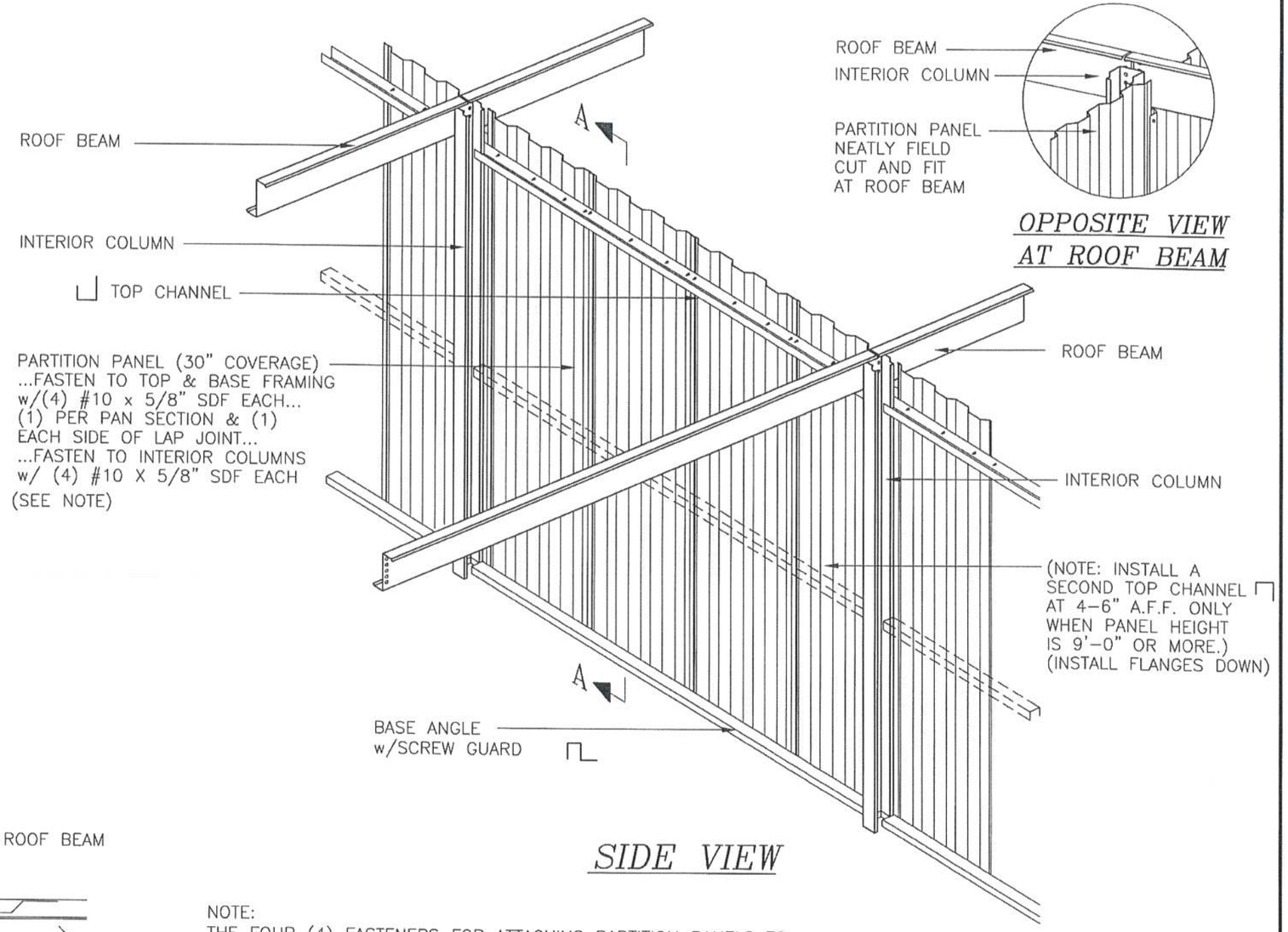
RELEASE FOR CO



SECTION A–A



PLAN VIEW



SIDE VIEW

OPPOSITE VIEW AT ROOF BEAM

NOTE:
THE FOUR (4) FASTENERS FOR ATTACHING PARTITION PANELS TO INTERIOR COLUMNS ARE INSTALLED AT THE TOP, BOTTOM AND AT THE 1/3 POINTS NOT TO EXCEED A 3'–0" VERTICAL SPACING BETWEEN FASTENERS.

REVISIONS	DATE	BY
REVISED DIRECTION OF MID TOP CHANNEL	3/17/04	JCM
REVISED INTERIOR COLUMNS	8/29/02	BAM
ADDED TOP CHANNEL AT PANELS OVER 9'–0"	2/7/02	BDL
ADDED NOTE FOR INTERIOR COLUMNS	4/2/01	TLR
GENERAL REVISIONS	5/7/99	CJG

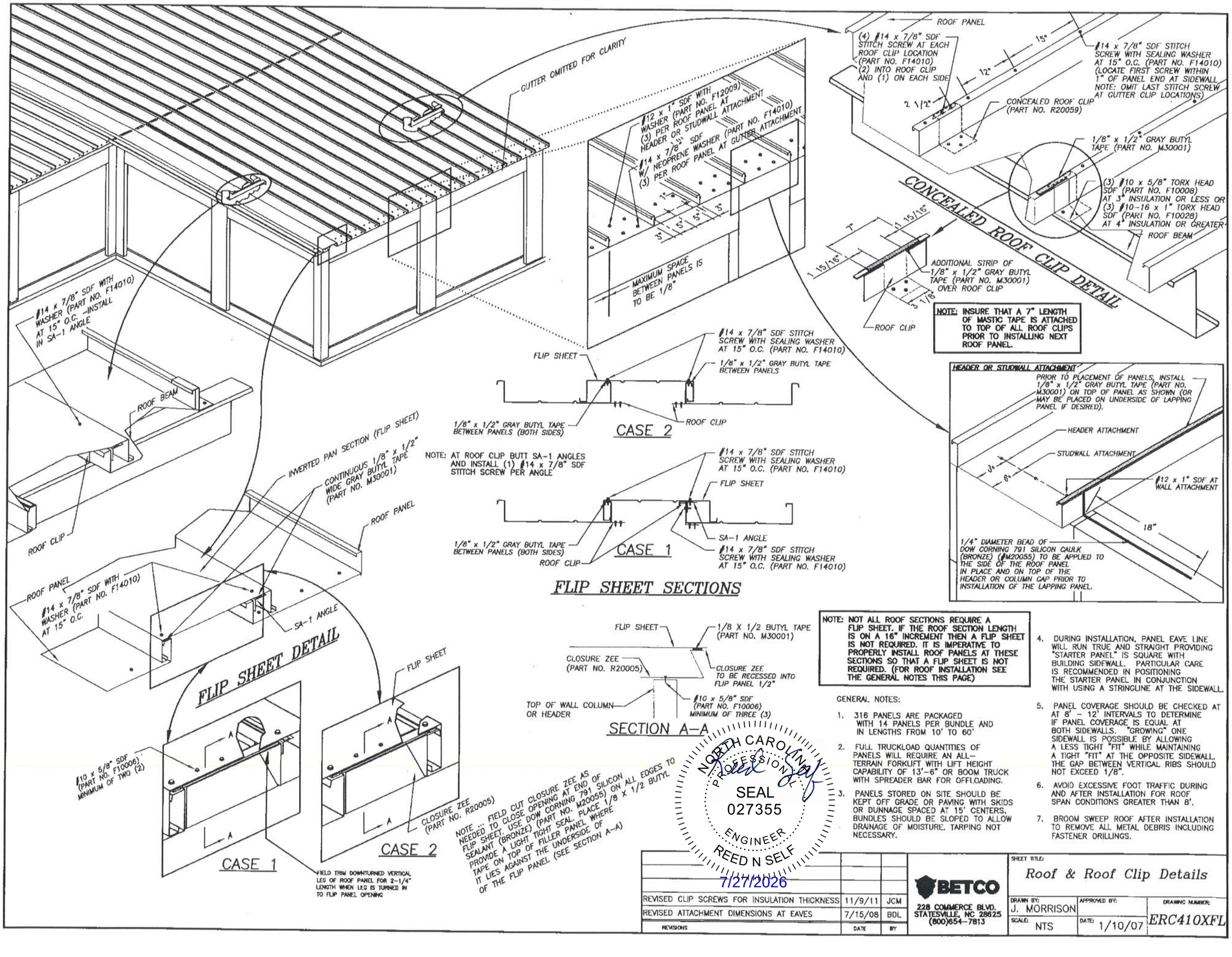
NORTH CAROLINA PROFESSIONAL SEAL 027355 ENGINEER REED N SELF
7/27/2026

BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800)654–7813

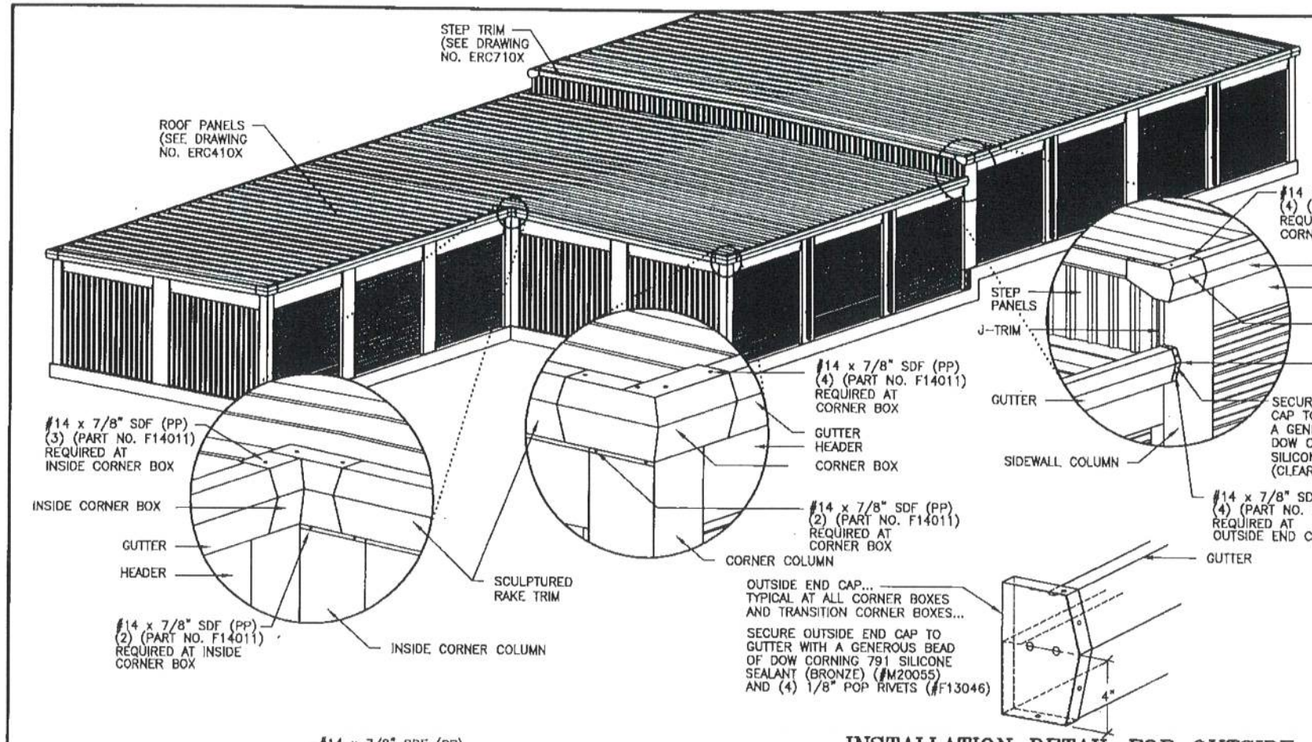
SHEET TITLE:
Partition – Interior Column to Interior Column (all eave heights)

DRAWN BY:	APPROVED BY:	DRAWING NUMBER:
J POPE		ERC203X
SCALE: NTS	DATE: 6/22/98	

RELEASE FOR CONSTRUCTION DATE 7/27/2026



RELEASE FOR CONSTRUCTION DATE 7/27/2026



REVISIONS	DATE	BY
REVISED PANEL OVERHANG	1/3/08	LKW
REVISED GUTTER LAP DETAIL	3/20/03	JCM
REVISED FASTENER SIZE	1/15/03	JCM
REVISED GUTTER JOINT DETAIL	10/9/02	JCM
CHANGED INSIDE END CAP TO OUTSIDE END CAP	12/13/00	BDL
REVISED DOWNSPOUTS	07/10/00	JCM
GENERAL REVISIONS	03/19/99	FOX

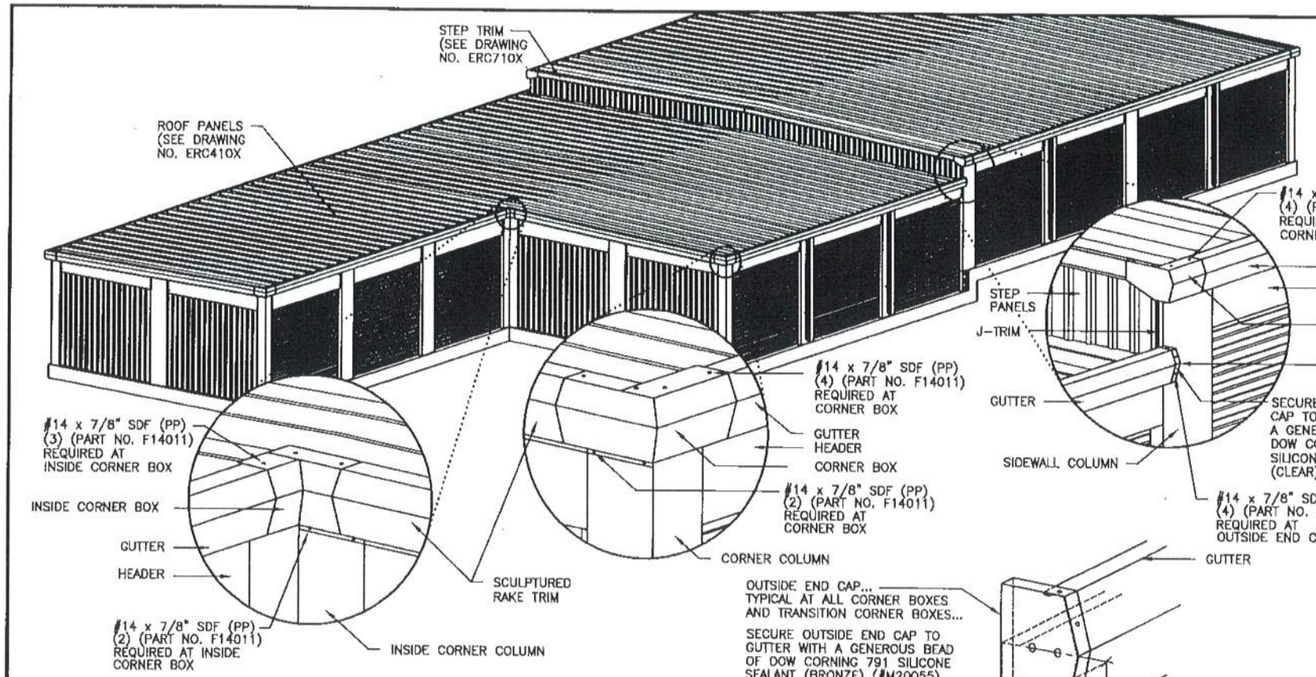
BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800)654-7813

SHEET TITLE: *Sculptured Rake Trim, Extended Gutters and Downspouts*

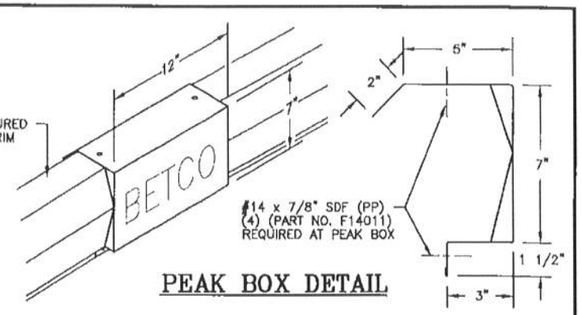
DRAWN BY:	APPROVED BY:	DRAWING NUMBER:
CJG		ERC505X
SCALE: NTS	DATE: 4/7/98	

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027355 REED N SELF
7/27/2026

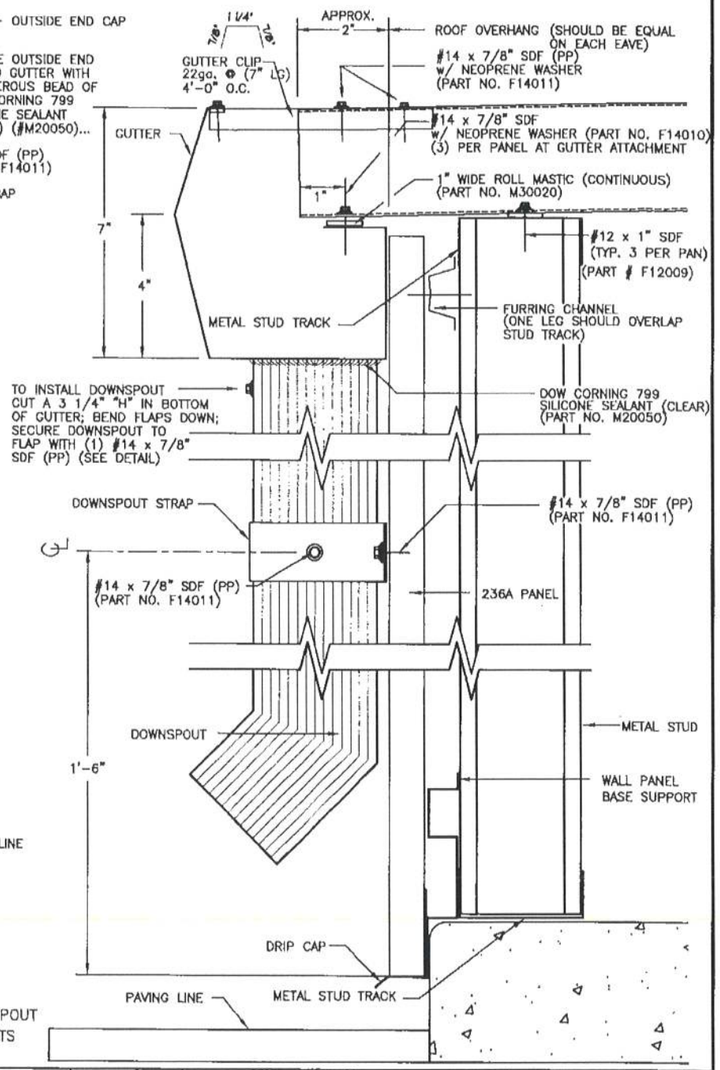
RELEASE FOR CONSTRUCTION DATE 7/27/2026

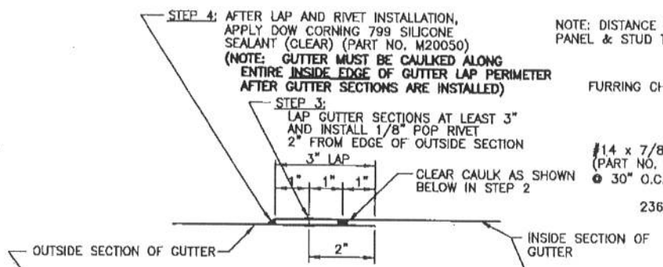


INSTALLATION DETAIL FOR OUTSIDE END CAP WITHIN CORNER BOXES

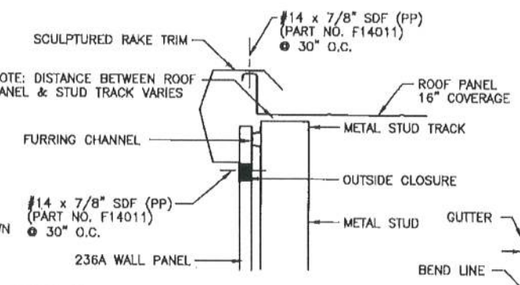


PEAK BOX DETAIL

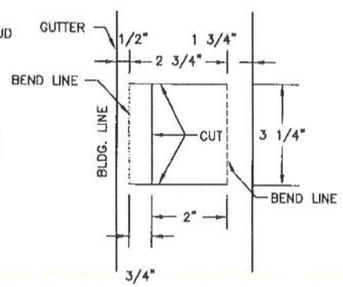




SECTION AT GUTTER LAP JOINT

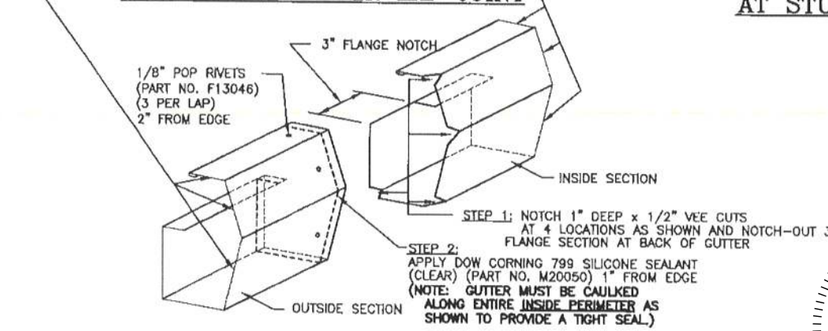


SECTION AT RAKE AT STUDWALL



TYPICAL DOWNSPOUT OPENING

NOTE: SHOWN FOR A 3" X 4" DOWNSPOUT ADJUST ACCORDINGLY PER COMPONENTS



TYPICAL GUTTER LAP JOINT

REVISIONS	DATE	BY
REVISED PANEL OVERHANG	1/3/08	LKW
ADDED RAKE AT STUDWALL DETAIL	1/16/04	JCM
REVISED GUTTER LAP DETAIL	3/20/03	JCM
REVISED FASTENER SIZE	1/15/03	JCM
REVISED GUTTER JOINT DETAIL	10/8/02	JCM
REVISED STUDWALL NOTES	8/29/02	BAM
CHANGED INSIDE END CAP TO OUTSIDE END CAP	12/13/00	BDL

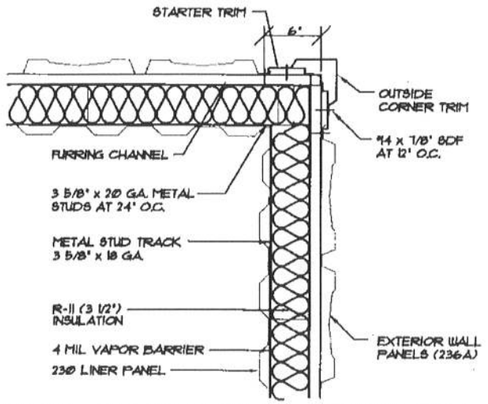
BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800)654-7813

SHEET TITLE: *Sculptured Rake Trim, Extended Gutters and Downspouts at Studwall*

DRAWN BY:	APPROVED BY:	DRAWING NUMBER:
CJG		ERC506X
SCALE: NTS	DATE: 4/7/98	

NORTH CAROLINA PROFESSIONAL SEAL 027355 ENGINEER REED N SELF
7/27/2026

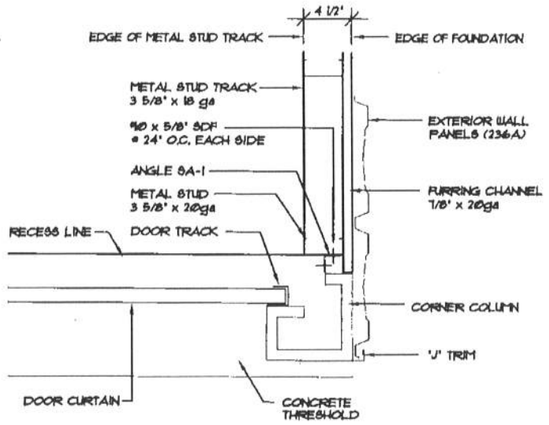
RELEASE FOR CONSTRUCTION DATE 7/27/2026



INSULATED STUDWALL CORNER DETAIL

A/600

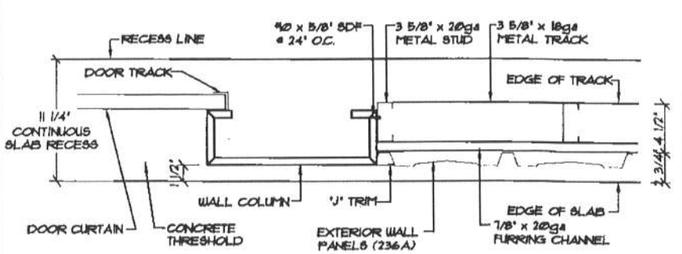
NOT TO SCALE



STUDWALL CONSTRUCTION @ CORNER COLUMN

C/600

NOT TO SCALE

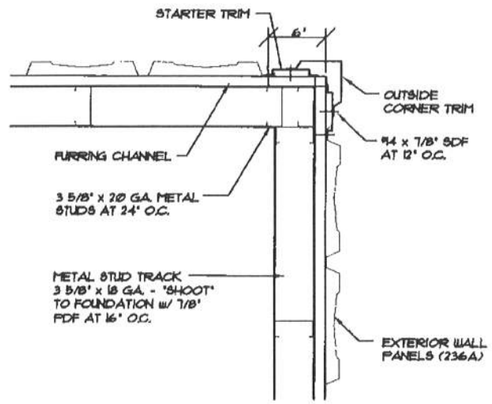


*NOTE: WALL PANELS AND 'J' TRIM MUST LINE UP WITH OUTSIDE EDGE OF WALL COLUMN

STUDWALL CONSTRUCTION @ WALL COLUMN IN RECESS

E/600

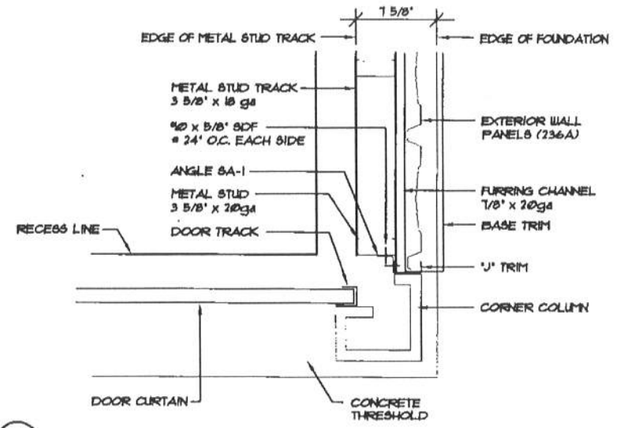
NOT TO SCALE



UNINSULATED STUDWALL CORNER DETAIL

B/600

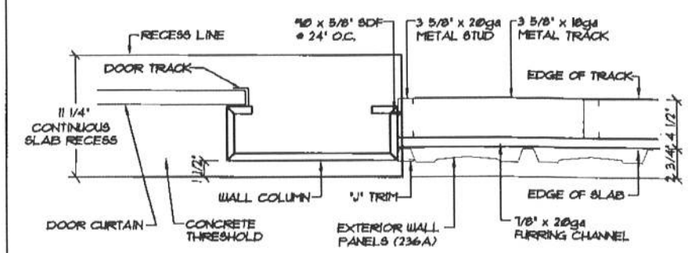
NOT TO SCALE



STUDWALL CONSTRUCTION @ CORNER COLUMN W/ THRESHOLD

D/600

NOT TO SCALE



*NOTE: WALL PANELS AND 'J' TRIM MUST LINE UP WITH OUTSIDE EDGE OF WALL COLUMN

STUDWALL CONSTRUCTION @ WALL COLUMN

F/600

NOT TO SCALE

NORTH CAROLINA PROFESSIONAL SEAL 027355 ENGINEER REED N SELF

7/27/2026

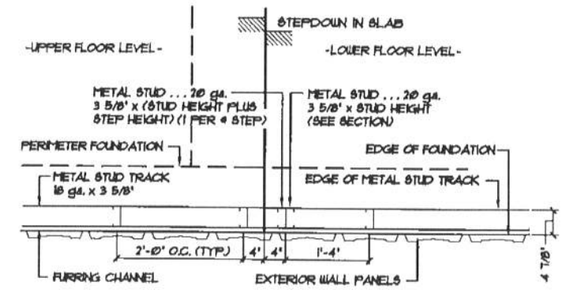
REVISIONS	DATE	BY
⚠ REVISED STUD SIZE	8/29/02	BAM

BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800)654-7813

SHEET TITLE: Studwall Details

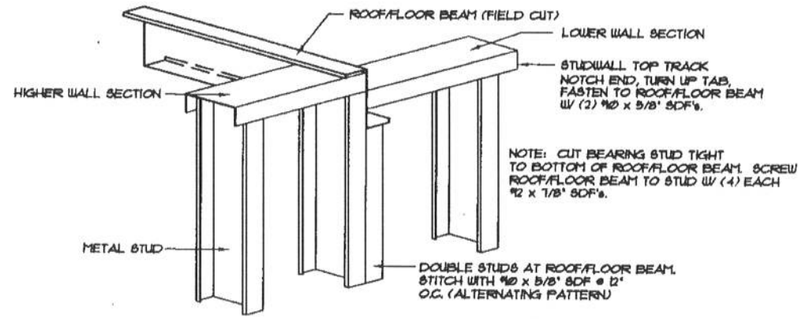
DRAWN BY:	APPROVED BY:	DRAWING NUMBER:
CJG		ERC600X
SCALE: NTS	DATE: 4/14/00	

RELEASE FOR CONSTRUCTION DATE 7/27/2026



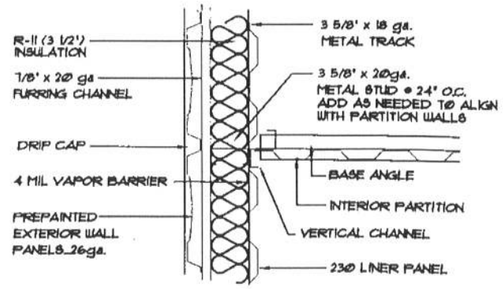
A/601 PLAN VIEW OF STUDWALL @ FLOOR STEPDOWN

NOT TO SCALE



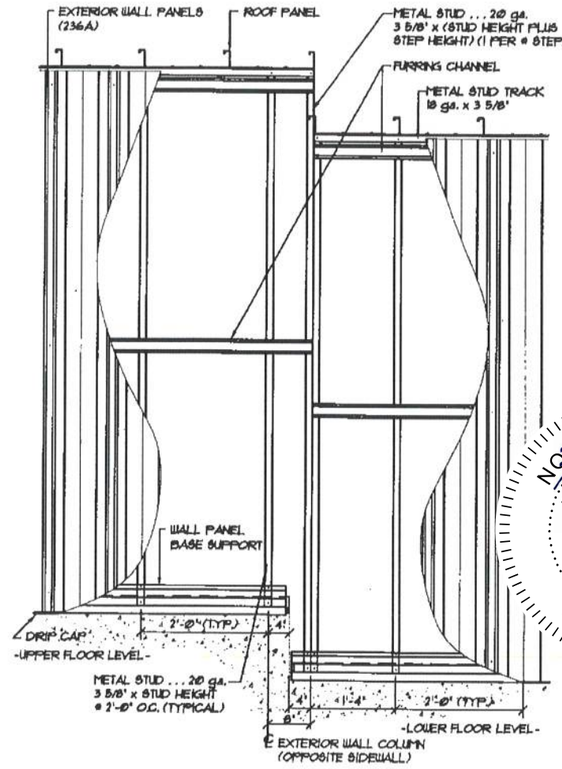
C/601 ROOF/FLOOR BEAM @ STUDWALL

NOT TO SCALE



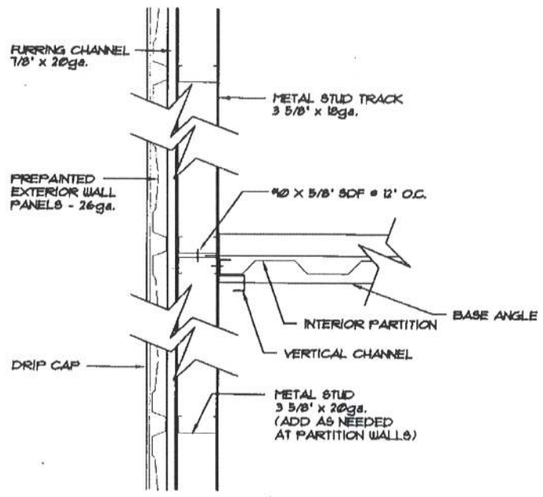
E/601 PARTITION INSTALLATION AT INSULATED EXTERIOR STUDWALL

NOT TO SCALE



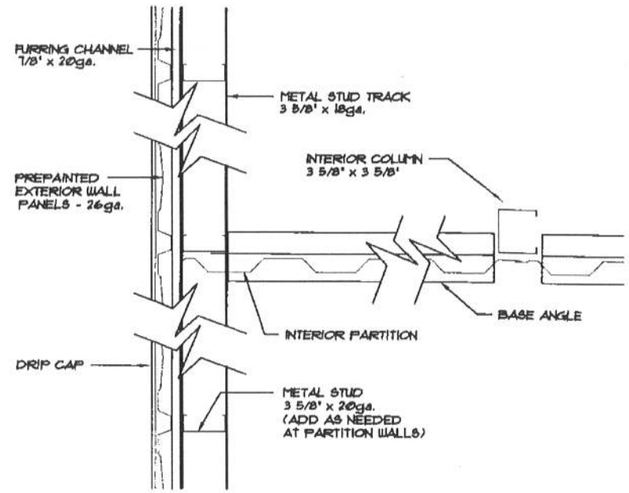
B/601 ELEVATION @ STUDWALL AND STEPDOWN

NOT TO SCALE



D/601 PARTITION INSTALLATION UNDER ROOF BEAM

NOT TO SCALE



F/601 PARTITION INSTALLATION AT STUDWALL

NOT TO SCALE

NORTH CAROLINA PROFESSIONAL SEAL 027355 ENGINEER REED N SELF

7/27/2026

3 REVISED C/601 TO INCLUDE FLOOR BEAM	5/1/03	JCM
2 REVISED C/601 TO INCLUDE FLOOR BEAM	4/17/03	JCM
1 REVISED STUD SIZE	8/29/02	BAM
REVISIONS	DATE	BY

BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800)654-7813

SHEET TITLE: Studwall Details

DRAWN BY:	APPROVED BY:	DRAWING NUMBER:
CJG		ERC601X
SCALE: NTS	DATE: 4/14/00	

RELEASE FOR CONSTRUCTION DATE 7/27/2026

① EXTERIOR STUDWALL CONSTRUCTION • FLAT SLAB: (SEE ERC630X)

-3 5/8" METAL STUDS @ 24" O.C. – 20ga
-3 5/8" CONTINUOUS FLOOR AND CEILING TRACK – 18ga. – FASTEN w/ 3/8" x 3" WEDGE ANCHOR (2" MIN. EMBEDDMENT) @ 30" O.C. MAX
-2 OR 3 ROWS CONTINUOUS 20ga. FURRING CHANNELS (NOTE #2)
-PRE-PAINTED EXTERIOR 236A WALL PANELS
-WALL PANEL BASE SUPPORT
-DRIP CAP (#T60120)
*3 1/2" THICK FIBERGLASS INSULATION
*4 MIL POLYETHYLENE VAPOR BARRIER
*230 LINER PANELS @ INTERIOR (ATTACH EACH PANEL TO BASE & TOP TRACK WITH 4 EACH #10 x 5/8" SDF's)
*J-TRIM @ TOP OF LINER PANELS
-SEE NOTE #4 FOR GENERAL STUDWALL CONSTRUCTION NOTES.

② EXTERIOR STUDWALL CONSTRUCTION • RECESS: (SEE ERC630X)

-3 5/8" METAL STUDS @ 24" O.C. – 20ga
-3 5/8" CONTINUOUS FLOOR AND CEILING TRACK – 18ga. – FASTEN w/ 3/8" x 3" WEDGE ANCHOR (2" MIN. EMBEDDMENT) @ 30" O.C. MAX
-3 OR 4 ROWS CONTINUOUS 20ga. FURRING CHANNELS (NOTE #2)
-PRE-PAINTED EXTERIOR 236A WALL PANELS
-BASE TRIM (#T60593)
*3 1/2" THICK FIBERGLASS INSULATION
*4 MIL POLYETHYLENE VAPOR BARRIER
*230 LINER PANELS @ INTERIOR (ATTACH EACH PANEL TO BASE & TOP TRACK WITH 4 EACH #10 x 5/8" SDF's)
*J-TRIM @ TOP OF LINER PANELS
-SEE NOTE #4 FOR GENERAL STUDWALL CONSTRUCTION NOTES.

③ INSULATED LOAD BEARING STUDWALL :

-3 5/8" METAL STUDS @ 24" O.C. – 20ga
-3 5/8" CONTINUOUS FLOOR AND CEILING TRACK – 18ga. – FASTEN w/ 3/8" x 3" WEDGE ANCHOR (2" MIN. EMBEDDMENT) @ 30" O.C. MAX
-3 1/2" THICK FIBERGLASS INSULATION
-4 MIL POLYETHYLENE VAPOR BARRIER
-230 LINER PANELS (EACH SIDE-ATTACH EACH PANEL TO TOP & BASE TRACK WITH 4 EACH #10 x 5/8" SDF's)
-J-TRIM @ TOP OF LINER PANELS
-SEE NOTE #4 FOR GENERAL STUDWALL CONSTRUCTION NOTES.

④ INSULATED NON-LOAD BEARING STUDWALL :

-3 5/8" METAL STUDS @ 24" O.C. – 20ga
-3 5/8" CONTINUOUS FLOOR AND CEILING TRACK – 20ga. (ATTACH BASE TRACK TO CONCRETE FLOOR SLAB WITH 7/8" PDF's @ 24" O.C)
-3 1/2" THICK FIBERGLASS INSULATION
-4 MIL POLYETHYLENE VAPOR BARRIER
-230 LINER PANELS (EACH SIDE-ATTACH EACH PANEL TO TOP & BASE TRACK WITH 4 EACH #10 x 5/8" SDF's)
-J-TRIM @ TOP OF LINER PANELS
-SEE NOTE #4 FOR GENERAL STUDWALL CONSTRUCTION NOTES.

⑤ EXTERIOR STUDWALL CONSTRUCTION • HVAC INSET/ ALCOVE: . . (ERC 603X & 604X)

-3 5/8" METAL STUDS @ 24" O.C. – 20ga
-3 5/8" CONTINUOUS FLOOR AND CEILING TRACK – 18ga. – FASTEN w/ 3/8" x 3" WEDGE ANCHOR (2" MIN. EMBEDDMENT) @ 30" O.C. MAX
-3 OR 4 ROWS CONTINUOUS 20ga. FURRING CHANNELS (NOTE #2)
-PRE-PAINTED EXTERIOR 236A WALL PANELS
-DRIP CAP (#T50032)
*3 1/2" THICK FIBERGLASS INSULATION
*4 MIL POLYETHYLENE VAPOR BARRIER
*230 LINER PANELS @ INTERIOR (ATTACH EACH PANEL TO BASE & TOP TRACK WITH 4 EACH #10 x 5/8" SDF's)
*J-TRIM @ TOP OF LINER PANELS
-SEE NOTE #4 FOR GENERAL STUDWALL CONSTRUCTION NOTES.

⑥ FIRE RESISTANT PARTITION . . . 1 HOUR RATED UL • U465. . . . (NON-LOAD BEARING)

ONE HOUR FIREWALL CONSTRUCTION:
-3 5/8" METAL STUDS @ 24" O.C. – 20ga.
-3 5/8" CONTINUOUS FLOOR and CEILING TRACK – 20ga (TOP TRACK MUST FOLLOW SLOPE OF ROOF DECK) (SECURE BOTTOM TRACK W/ 7/8" PDF'S AT 24" O.C.)
-5/8" GYPSUM BOARD (X-RATED) EACH SIDE IT MUST BE PLACED SUCH THAT ALL JOINTS ARE VERTICAL.
-GYPSUM BOARD SHALL BE ATTACHED TO STUDS, FLOOR AND CEILING TRACK USING TYPE "S" SELF-TAPPING SCREWS ALONG EDGES OF BOARD SPACED 8" O.C. AND 12" O.C. IN THE FIELD.
-VINYL OR CASE-IN, DRY OR PRE-MIXED JOINT COMPOUND APPLIED IN TWO COATS TO JOINTS SCREW-HEADS. PERFORATED PAPER TAPE, 2" WIDE, EMBEDDED IN FIRST LAYER OF COMPOUND OVER ALL JOINTS.
*3 1/2" THICK FIBERGLASS INSULATION
*4 MIL POLYETHYLENE VAPOR BARRIER
-SEE NOTE #4 FOR GENERAL STUDWALL CONSTRUCTION NOTES.

⑦ FIRE RESISTANT PARTITION . . . 1 HOUR RATED UL • U425. . . . (LOAD BEARING)

ONE HOUR FIREWALL CONSTRUCTION:
-3 5/8" METAL STUDS @ 24" O.C. – 20ga.
-3 5/8" CONTINUOUS FLOOR & CEILING TRACK – 18ga – FASTEN w/ 3/8" x 3" WEDGE ANCHOR (2" MIN. EMBEDDMENT) @ 30" O.C. MAX (TOP TRACK MUST FOLLOW SLOPE OF ROOF DECK)
-5/8" GYPSUM BOARD (X-RATED) EACH SIDE IT MUST BE PLACED SUCH THAT ALL JOINTS ARE VERTICAL.
-GYPSUM BOARD SHALL BE ATTACHED TO STUDS, FLOOR AND CEILING TRACK USING TYPE "S" SELF-TAPPING SCREWS ALONG EDGES OF BOARD SPACED 8" O.C. AND 12" O.C. IN THE FIELD.
-VINYL OR CASE-IN, DRY OR PRE-MIXED JOINT COMPOUND APPLIED IN TWO COATS TO JOINTS SCREW-HEADS. PERFORATED PAPER TAPE, 2" WIDE, EMBEDDED IN FIRST LAYER OF COMPOUND OVER ALL JOINTS.
*3 1/2" THICK FIBERGLASS INSULATION
*4 MIL POLYETHYLENE VAPOR BARRIER
-SEE NOTE #4 FOR GENERAL STUDWALL CONSTRUCTION NOTES.

⑧ EXTERIOR FIRE RESISTANT PARTITION . . . . -UL • U423. . (1 HOUR RATED) (LOAD BEARING)

ONE HOUR FIREWALL CONSTRUCTION:
-3 5/8" METAL STUDS @ 24" O.C. – 20ga.
-3 5/8" CONTINUOUS FLOOR AND CEILING TRACK – 18ga. – FASTEN w/ 3/8" x 3" WEDGE ANCHOR (2" MIN. EMBEDDMENT) @ 30" O.C. MAX (TOP TRACK MUST FOLLOW SLOPE OF ROOF DECK)
-2 OR 3 ROWS CONTINUOUS 20ga. FURRING CHANNELS (NOTE #2)
-PRE-PAINTED EXTERIOR 236A WALL PANELS
-WALL PANEL BASE SUPPORT
-DRIP CAP (#T60120)
-1 LAYER 5/8" GYPSUM BOARD (X-RATED) EACH SIDE IT MUST BE PLACED SUCH THAT ALL JOINTS ARE VERTICAL.
-GYPSUM BOARD SHALL BE ATTACHED TO STUDS, FLOOR AND CEILING TRACK USING TYPE "S" SELF-TAPPING SCREWS ALONG EDGES OF BOARD SPACED 8" O.C. AND 12" O.C. IN THE FIELD.
-VINYL OR CASE-IN, DRY OR PRE-MIXED JOINT COMPOUND APPLIED IN TWO COATS TO JOINTS SCREW-HEADS. PERFORATED PAPER TAPE, 2" WIDE, EMBEDDED IN FIRST LAYER OF COMPOUND OVER ALL JOINTS.
*3 1/2" THICK FIBERGLASS INSULATION
*4 MIL POLYETHYLENE VAPOR BARRIER
-SEE NOTE #4 FOR GENERAL STUDWALL CONSTRUCTION NOTES.

⑨ EXTERIOR FIRE RESISTANT PARTITIONS • RECESS: UL • U423. . . (1 HOUR RATED) (LOAD BEARING)

ONE HOUR FIREWALL CONSTRUCTION:
-3 5/8" METAL STUDS @ 24" O.C. – 20ga.
-3 5/8" CONTINUOUS FLOOR AND CEILING TRACK – 18ga. – FASTEN w/ 3/8" x 3" WEDGE ANCHOR (2" MIN. EMBEDDMENT) @ 30" O.C. MAX (TOP TRACK MUST FOLLOW SLOPE OF ROOF DECK)
-3 OR 4 ROWS CONTINUOUS 20ga. FURRING CHANNELS (NOTE #2)
-PRE-PAINTED EXTERIOR 236A WALL PANELS
-DRIP CAP (#T60593)
-1 LAYER 5/8" GYPSUM BOARD (X-RATED) EACH SIDE IT MUST BE PLACED SUCH THAT ALL JOINTS ARE VERTICAL.
-GYPSUM BOARD SHALL BE ATTACHED TO STUDS, FLOOR AND CEILING TRACK USING TYPE "S" SELF-TAPPING SCREWS ALONG EDGES OF BOARD SPACED 8" O.C. AND 12" O.C. IN THE FIELD.
-VINYL OR CASE-IN, DRY OR PRE-MIXED JOINT COMPOUND APPLIED IN TWO COATS TO JOINTS SCREW-HEADS. PERFORATED PAPER TAPE, 2" WIDE, EMBEDDED IN FIRST LAYER OF COMPOUND OVER ALL JOINTS.
*3 1/2" THICK FIBERGLASS INSULATION
*4 MIL POLYETHYLENE VAPOR BARRIER
-SEE NOTE #4 FOR GENERAL STUDWALL CONSTRUCTION NOTES.

⑩ EXTERIOR FIRE RESISTANT PARTITION • HVAC: INSET/ALCOVE UL • 423 . (1 HOUR RATED) (LOAD BEARING) (ERC 620X & 621X)

ONE HOUR FIREWALL CONSTRUCTION:
-3 5/8" METAL STUDS @ 24" O.C. – 20ga.
-3 5/8" CONTINUOUS FLOOR AND CEILING TRACK – 18ga. – FASTEN w/ 3/8" x 3" WEDGE ANCHOR (2" MIN. EMBEDDMENT) @ 30" O.C. MAX (TOP TRACK MUST FOLLOW SLOPE OF ROOF DECK)
-3 OR 4 ROWS CONTINUOUS 20ga. FURRING CHANNELS (NOTE #2)
-PRE-PAINTED EXTERIOR 236A WALL PANELS
-DRIP CAP (#T50032)
-1 LAYER 5/8" GYPSUM BOARD (X-RATED) EACH SIDE IT MUST BE PLACED SUCH THAT ALL JOINTS ARE VERTICAL.
-GYPSUM BOARD SHALL BE ATTACHED TO STUDS, FLOOR AND CEILING TRACK USING TYPE "S" SELF-TAPPING SCREWS ALONG EDGES OF BOARD SPACED 8" O.C. AND 12" O.C. IN THE FIELD.
-VINYL OR CASE-IN, DRY OR PRE-MIXED JOINT COMPOUND APPLIED IN TWO COATS TO JOINTS SCREW-HEADS. PERFORATED PAPER TAPE, 2" WIDE, EMBEDDED IN FIRST LAYER OF COMPOUND OVER ALL JOINTS.
*3 1/2" THICK FIBERGLASS INSULATION
*4 MIL POLYETHYLENE VAPOR BARRIER
-SEE NOTE #4 FOR GENERAL STUDWALL CONSTRUCTION NOTES.

NOTE #1: INTENTIONALLY BLANK.

NOTE #2: AS PER WALL CONSTRUCTION NOTES, EXTERIOR STUDWALLS ARE CONSTRUCTED WITH "X" OR "Y" ROWS OF FURRING CHANNELS IF WALL IS LESS THAN 9'-10 1/2" HGT. A.F.F., CONSTRUCT WITH "X" ROWS; OTHERWISE USE "Y".

NOTE #3: "*" ON THIS SHEET, REFERS TO THE ADDITIONAL MATERIALS REQUIRED FOR INSULATION OF WALL SYSTEM. NOT ALL WALLS ARE INSULATED. VERIFY WITH FLOOR PLANS. INSTALL INSULATION & RELATED MATERIALS ONLY IN WALLS DESIGNATED WITH AN "*" BESIDE THE DETAIL NUMBER ON THE FLOOR PLAN.

NOTE #4: GENERAL STUDWALL CONSTRUCTION:
A) – ATTACH STUDS WITH #10 X 5/8" SDF'S EACH SIDE OF TRACK (4 PER STUD).
B) – WALLS MUST EXTEND FROM FLOOR TO ROOF DECK AND INTO WALL COLUMN CAVITY.
C) – TOP TRACK MUST FOLLOW SLOPE OF ROOF LINE.

NORTH CAROLINA PROFESSIONAL SEAL 027355 ENGINEER REED N SELF
7/27/2026

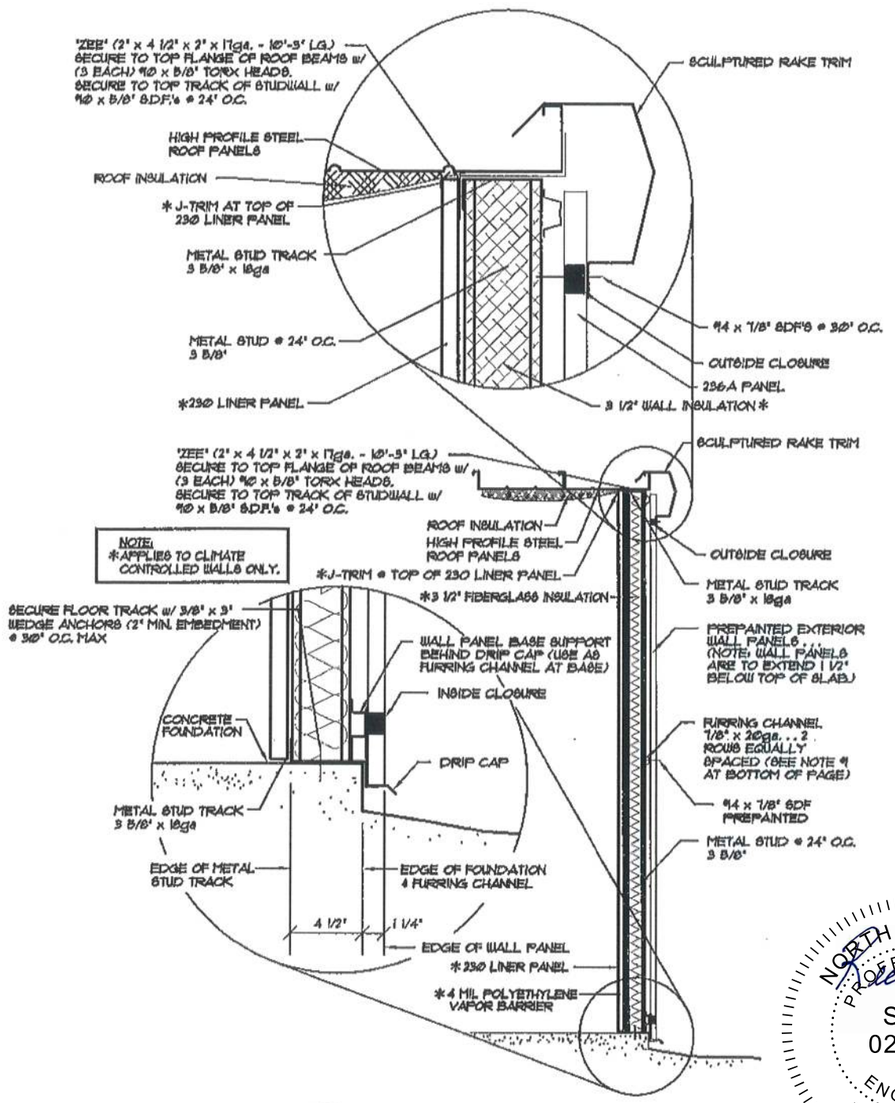
REVISIONS	DATE	BY
REVISED STUD TRACK FASTENERS TO CONCRETE	9/24/10	JCM
REVISED STUD TRACK FASTENERS	1/12/04	JCM
REVISED STUD SIZE	8/29/02	BAM
REVISE LAYERS, GYPSUM BOARD THICKNESS & UL ON NOTES #8, 9, 10	11/16/01	JRB
ADDED ERC 620X & 621X TO NOTE #10	08/28/01	JCM
CHANGED 5/8" TO (2 LAYERS 1/2")	02/21/01	DSF

BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800)654-7813

SHEET TITLE: Studwall Notes

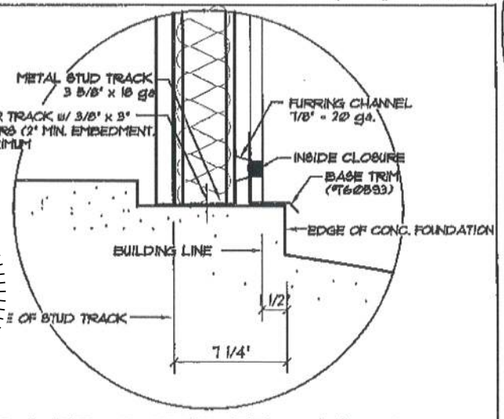
DRAWN BY:	APPROVED BY:	DRAWING NUMBER:
RS		ERC610X
SCALE: NTS	DATE: 11/02/00	

RELEASE FOR CONSTRUCTION DATE 7/27/2026

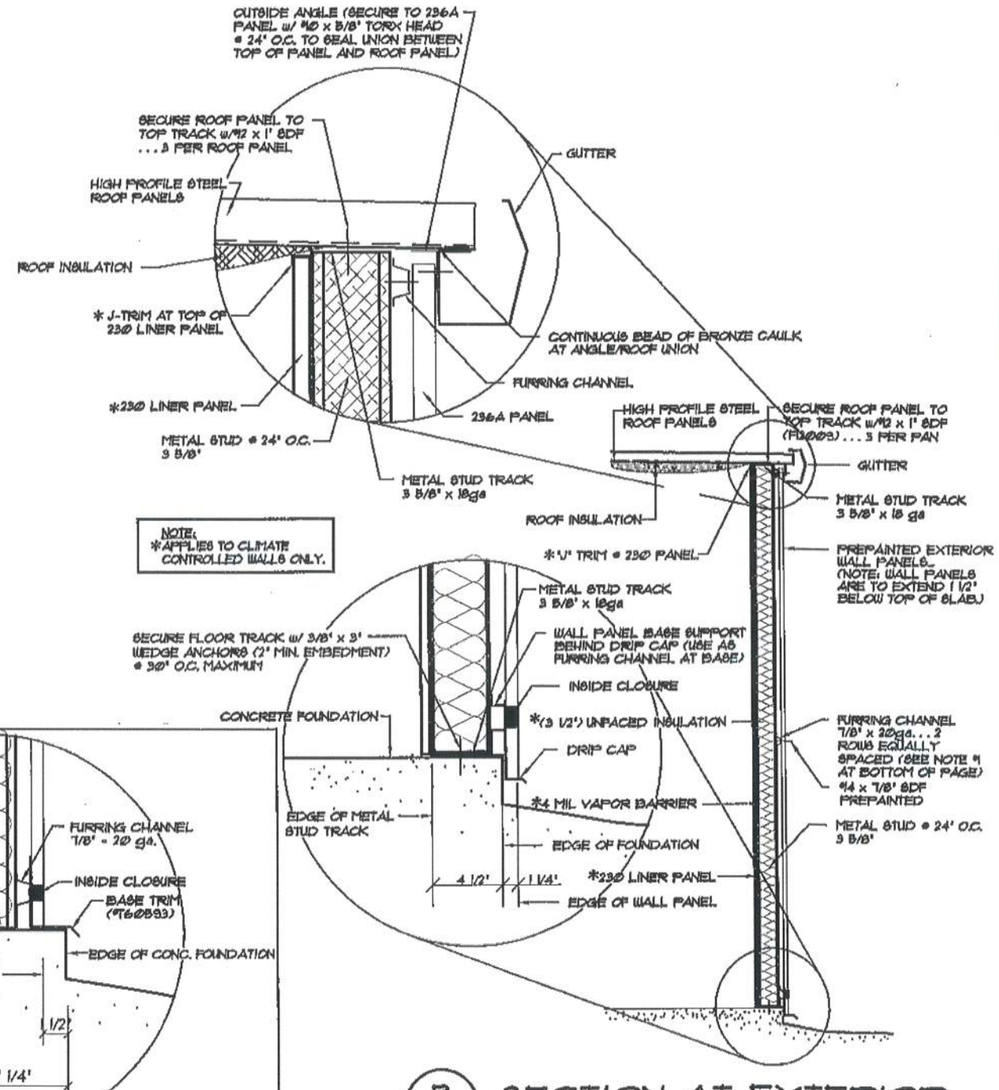


A/630 SECTION AT EXTERIOR STUDWALL ENDWALL

NOT TO SCALE



BASE CONDITION FOR STUDWALL IN RECESS



B/630 SECTION AT EXTERIOR STUDWALL SIDEWALL

NOT TO SCALE

NOTE #1: IF STUDWALL IS GREATER THAN OR EQUAL TO 9'-10 1/2" HGT. 2 EQUALLY SPACED ROWS OF INTERMEDIATE FURRING CHANNELS ARE REQUIRED BETWEEN BASE AND TOP OF STUDWALL.

NOTE #2: NOT ALL BUILDINGS HAVE ROOF INSULATION, CHECK CROSS SECTION FOR INSULATION.

REVISIONS	DATE	BY
REVISED ENDWALL ZEE FROM 5 3/4" TO 4 1/2"	5/24/23	BDL

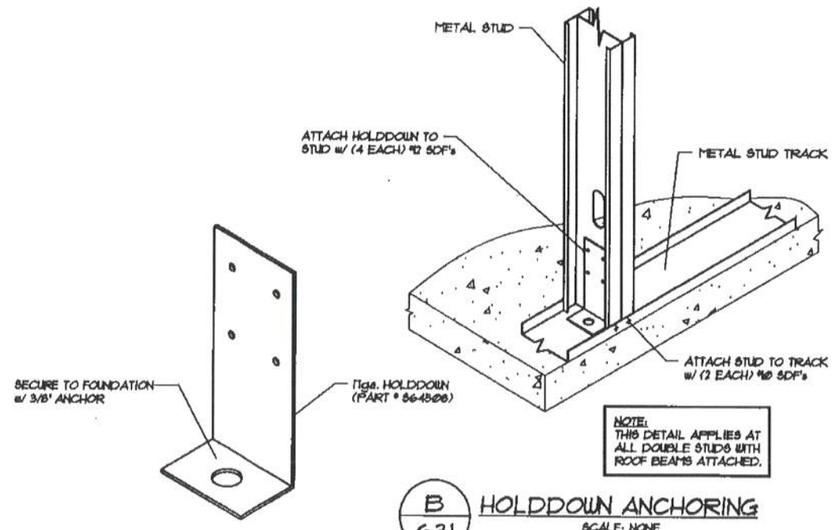
BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800)654-7813

SHEET TITLE: *Studwall Sections*

DRAWN BY:	APPROVED BY:	DRAWING NUMBER:
JCM		ERC630X
SCALE: NTS	DATE: 11/8/11	

NORTH CAROLINA PROFESSIONAL SEAL 027355 ENGINEER REED N SELF
7/27/2026

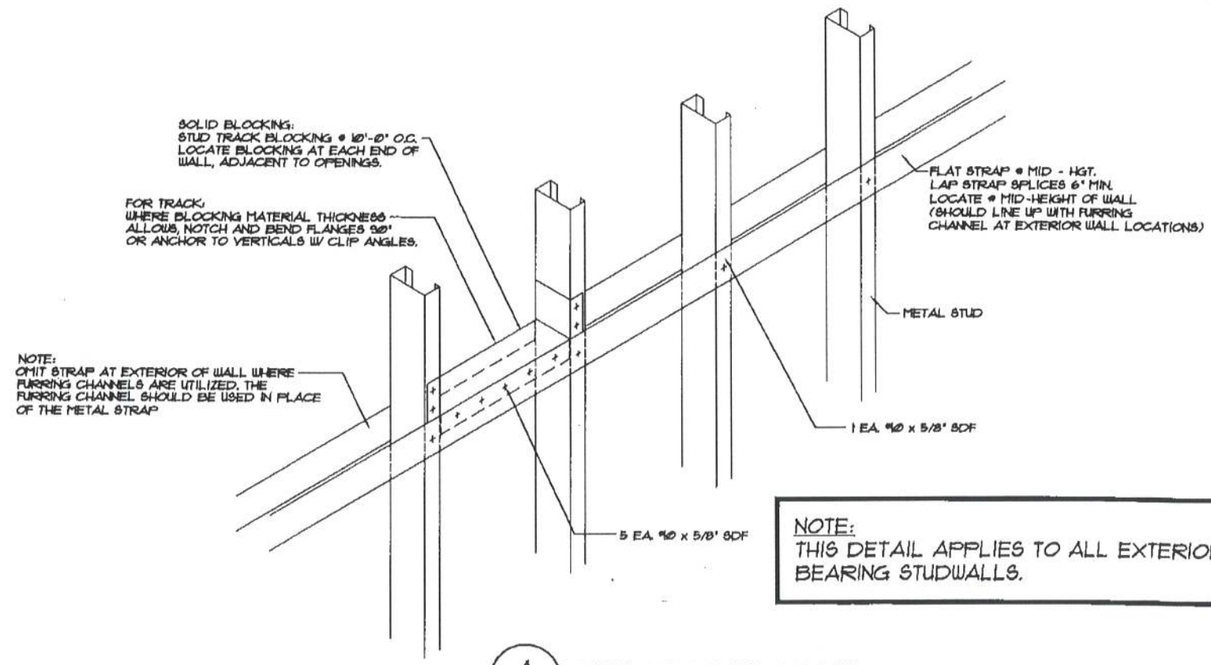
RELEASE FOR CONSTRUCTION DATE 7/27/2026



NOTE:
THIS DETAIL APPLIES AT ALL DOUBLE STUDS WITH ROOF BEAMS ATTACHED.

B / 631 HOLDDOWN ANCHORING

SCALE: NONE



NOTE:
THIS DETAIL APPLIES TO ALL EXTERIOR BEARING STUDWALLS.

A / 631 WALL BLOCKING DETAIL

SCALE: NONE

NORTH CAROLINA PROFESSIONAL SEAL 027355 ENGINEER REED N SELF

7/27/2026

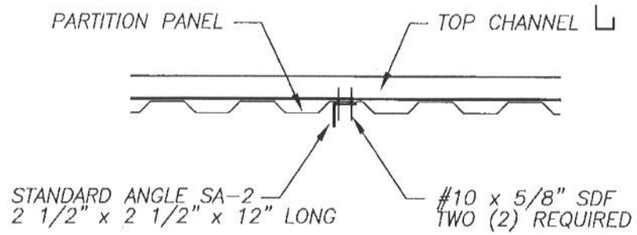
REVISIONS	DATE	BY

BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800)654-7813

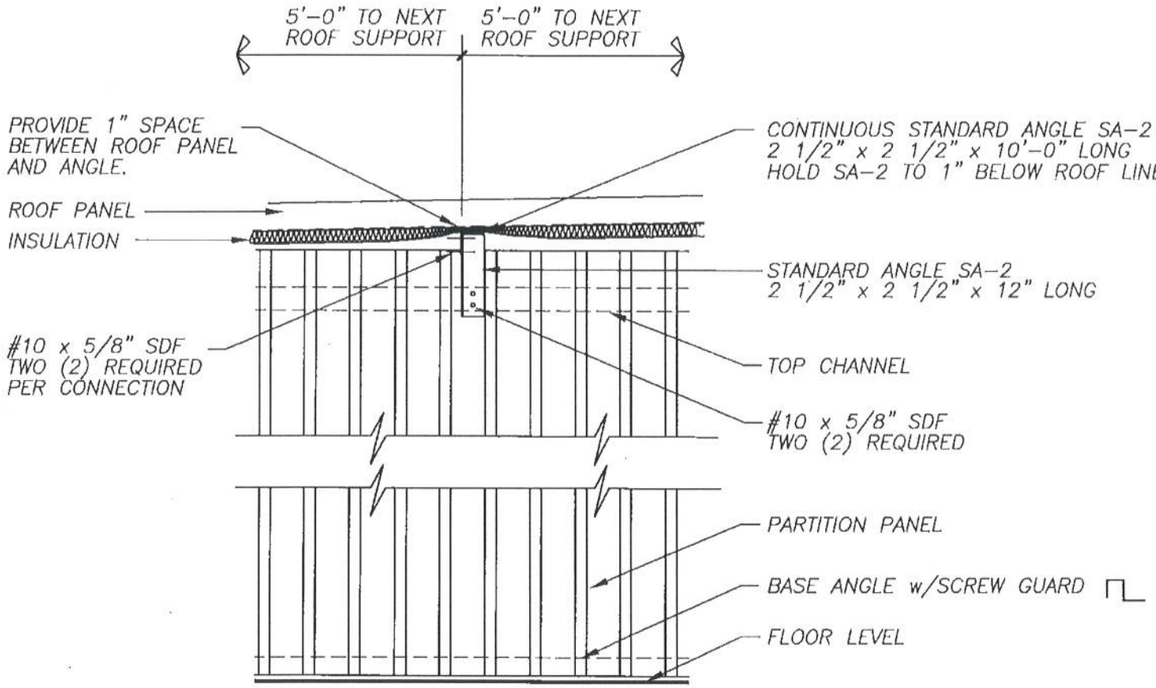
SHEET TITLE: *Studwall Details*

DRAWN BY:	APPROVED BY:	DRAWING NUMBER:
JCM		*ERC631X*
SCALE: NTS	DATE: 11/8/11	

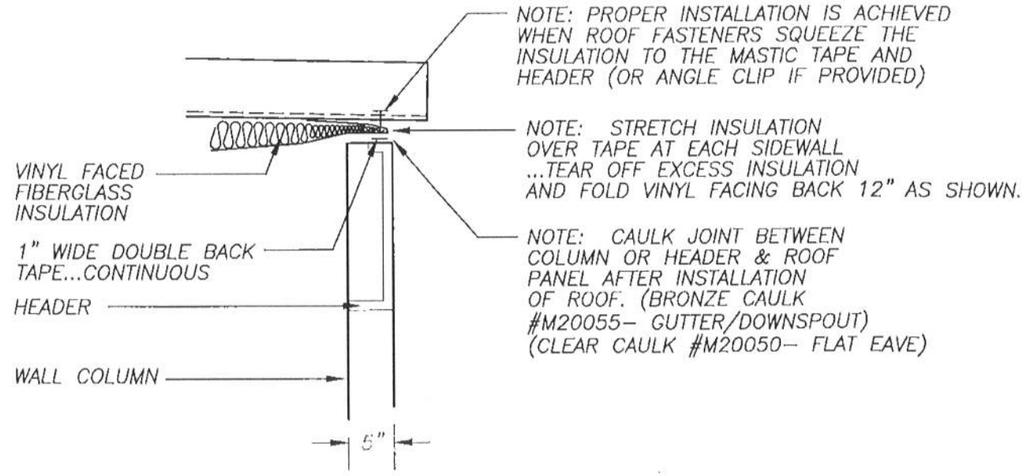
RELEASE FOR CONSTRUCTION DATE 7/27/2026



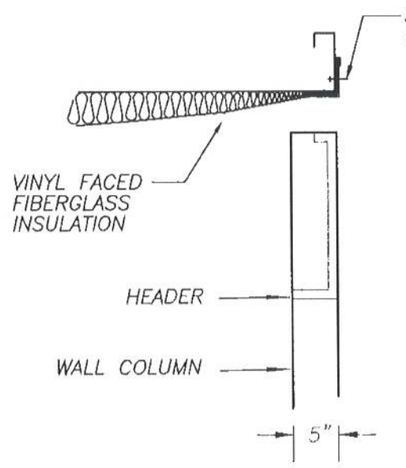
PLAN VIEW



ELEVATION AT INTERMEDIATE INSULATION SUPPORT



INSULATION INSTALLATION @ SIDEWALL



INSULATION INSTALLATION AT END WALL

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027355 REED N SELF
7/27/2026

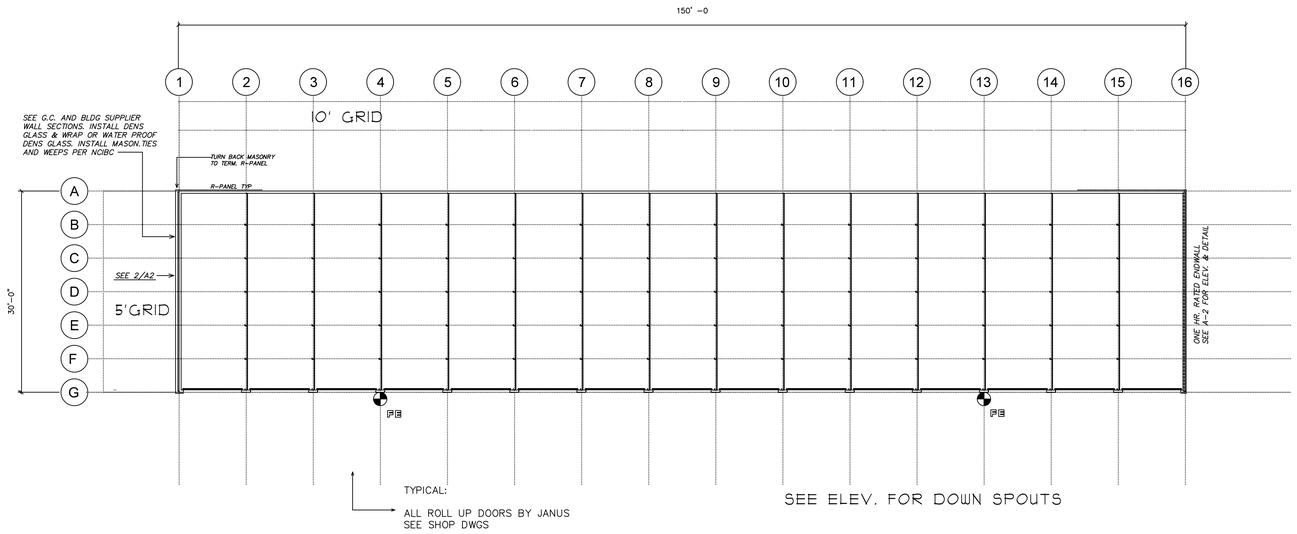
REVISIONS	DATE	BY
3 ADDED ROOF FASTENER NOTE	4/17/03	JCM
2 REVISED SA-2 GAP	1/14/03	BAM
1 GENERAL REVISIONS	3-8-99	FOX

BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800)654-7813

SHEET TITLE: Insulation installation

DRAWN BY:	APPROVED BY:	DRAWING NUMBER:
J Pope		ERC700X
SCALE: NTS	DATE: 6-27-94	

RELEASE FOR CONSTRUCTION DATE 7/27/2026



1/A-1 FLOOR PLAN - BLDG. G

3/32" = 1'-0"

SEE OVERALL SITE LOCATIONS FOR ADA UNITS.

FIRE EXTINGUISHERS

NOTE: INFORMATION SHOWN IS GENERAL AND SUBJECT TO BE REVISED PER TYPE AND LOCATIONS BY THE LOCAL FIRE MARSHALL. CONSULT WITH FIRE MARSHALL PRIOR TO FINAL PLACEMENT.

2A 10 BC

MAX TRAVEL DISTANCE TO UNIT 75'\ OR 150' BETWEEN UNITS. ONE UNIT MUST ALWAYS BE VISIBLE FROM ANY LOCATION.

LESS THAN 40# HANDLE MT. 5'-0 AFF MAX.

MORE THAN 40# HANDLE MT. 3'-4" AFF MAX.

CAB. AND/OR RELEASE MAX. 48" AFF

FE MAY BE WALL MT. W/MANUF. WALL BRACKET.

PROVIDE CLEAR INSTRUCTIONS AT EACH EXTINGUISHER REGARDING INSTRUCTIONAL USE.

IF FIRE MARSHALL DOES NOT LOCATE UNITS OR SUPPLIER DOES NOT SUPPLY SHOP DWG, ARCHITECT WILL LOCATE LOCATIONS PER KEY PLAN.

F.E. LOCATED AT EXTERIOR LOCATIONS * OUTSIDE UNITS ARE TO SPEC. PER WET LOCATIONS BY MANUF.

LAKESIDE SELF-STORAGE

HARNETT COUNTY
NORTH CAROLINA

BLDG. G

GENERAL NOTES:

1. SEE STRUCTURAL & G.C. CD DETAILS FOR CONSTRUCTION DETAILS. SEE BETCO DWGS.

REV.	DATE:	REVISION DESCRIPTION

G. CLEVELAND PATE, PLLC
Architecture • Planning
6013 Fordland Drive, Raleigh, NC 27606
919-851-0052

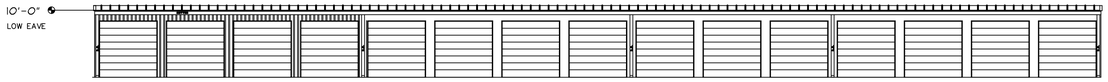
SEALS:

GROVER CLEVELAND PATE III
REGISTERED ARCHITECT
4895
NORTH CAROLINA
CARY, N.C.

7/20/26

FLOOR PLAN

GCP	GCP	SHEET: A-1
DESIGNED BY:	DRAWN BY:	
GCP	GCP	
CHECKED BY:	APPROVED BY:	OF:
FREEWAY1	FREEWAY1A	7.20/26
CAD FILE NAME:	PROJECT #	DATE:

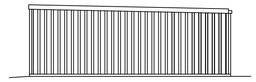


VERIFY ACTUAL JAMB DISTANCE FROM UNIT SEPARATION WALLS

SEE PLAN FOR FIRE EXTINGUISHERS

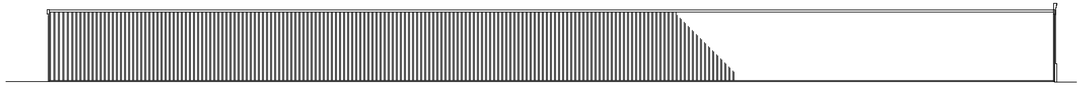
1 / A-2 BUILDING H-REAR ELEVATION

3/32" = 1'-0"



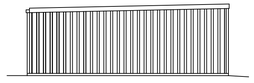
2 / A-2 BUILDING LEFT ELEVATION

3/32" = 1'-0"



3 / A-2 BUILDING FRONT ELEVATION

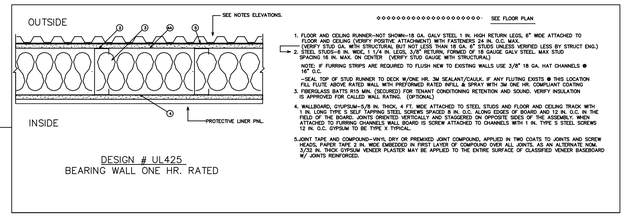
3/32" = 1'-0"



4 / A-2 BUILDING RIGHT ELEVATION

3/32" = 1'-0"

RIGHT SIDE ELEVATION ONE HR. RATED WALL



DESIGN # UL425
BEARING WALL ONE HR. RATED

LAKESIDE SELF-STORAGE

HARNETT COUNTY
NORTH CAROLINA

BLDG. G

GENERAL NOTES:

1. SEE STRUCTURAL & G.C. CD DETAILS FOR CONSTRUCTION DETAILS. SEE BETCO DWGS.

REV.	DATE:	REVISION DESCRIPTION

G. CLEVELAND PATE, PLLC
Architecture ◦ Planning
6013 Fordland Drive, Raleigh, NC 27606
919-851-0052

SEALS:

GROVER CLEVELAND PATE III
REGISTERED ARCHITECT
4895
NORTH CAROLINA
CARY, N.C.

7/20/26

ELEVATIONS

GCP	GCP	SHEET: A-2
DESIGNED BY:	DRAWN BY:	
GCP	GCP	
CHECKED BY:	APPROVED BY:	OF:
FREEWAY1	FREEWAY1A	7/20/26
CAD FILE NAME:	PROJECT #	DATE: