



CONSOLIDATED SELF STORAGE
BENSON, NORTH CAROLINA

SUBMITTED TO :

CONSOLIDATED OF NC
ATTN: MARK MANNING
108 PROFESSIONAL COURT
GARNER, NORTH CAROLINA 27529
PHONE: (919) 422-8404

WIND LOAD DESIGN DATA:

ULTIMATE DESIGN WIND SPEED (V_{ULT}): 110 MPH
 NOMINAL DESIGN WIND SPEED (V_{ASD}): 86 MPH
 RISK CATEGORY: I
 WIND EXPOSURE: B
 INTERNAL PRESSURE COEFFICIENT: ± 0.18

SNOW LOAD DESIGN DATA:

GROUND SNOW LOAD (P_g): 15 PSF
 FLAT-ROOF SNOW LOAD (P_f): 12.1 PSF
 SNOW EXPOSURE FACTOR (C_e): 1.2
 SNOW LOAD IMPORTANCE FACTOR (I): 0.8
 THERMAL FACTOR (C_t): 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 7-10 SECTION 12.8)
- BASIC SEISMIC-FORCE-RESISTING SYSTEM: LIGHT FRAMED WALLS WITH STEEL SHEAR PANELS
- SITE CLASS: D
- DESIGN BASE SHEAR:
 - BUILDING "1": 0.488^K
 - BUILDING "2": 0.488^K
 - BUILDING "3": 0.488^K
- RESPONSE MODIFICATION FACTOR (R): 7.0
- SEISMIC RESPONSE COEFFICIENT (C_s): 0.026
- MAPPED SPECTRAL RESPONSE ACCELERATION
 - (S_B): 17.4% G
 - (S_1): 8.3% G
- SPECTRAL RESPONSE COEFFICIENTS
 - (S_{DB}): 18.5% G
 - (S_{D1}): 13.2% G

BUILDING DATA :

BUILDING DESCRIPTION :
 SINGLE STORY METAL BUILDINGS BOLTED TO CONCRETE SLAB FOUNDATIONS.

BUILDING SIZE :

BUILDING "1"	30' x 125'	=	3,750 sq. ft.	8'-6" EAVE HEIGHT
BUILDING "2"	30' x 125'	=	3,750 sq. ft.	8'-6" EAVE HEIGHT
BUILDING "3"	30' x 125'	=	3,750 sq. ft.	8'-6" EAVE HEIGHT
			TOTAL =	11,250 sq. ft.

PARKING DATA :
 SEE SITE PLAN BY OTHERS

BUILDING CODE :
 THE 2018 NORTH CAROLINA BUILDING CODE

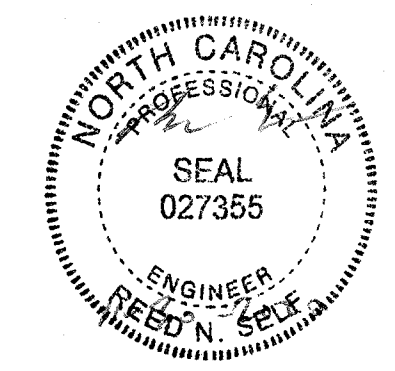
DESIGN CRITERIA :
 THESE BUILDINGS HAVE BEEN DESIGNED TO CONFORM TO THE STRUCTURAL REQUIREMENTS OF THE 2018 NORTH CAROLINA BUILDING CODE, WITH CURRENT REVISIONS.

THESE BUILDINGS HAVE 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 :
 NC20262



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	ERC752X
ERC016X	ERC201X	ERC500X	ERC620X	ERC753X
ERC100X	ERC202X	ERC505X	ERC621X	ERC754X
ERC105X	ERC203X	ERC506X	ERC622X	ERC800X
ERC106X	ERC204X	ERC515X	ERC623X	ERC900X
ERC110X	ERC206X	ERC800X	ERC624X	ERC901X
ERC112X	ERC207X	ERC601X	ERC625X	ERC902X
ERC115X	ERC208X	ERC602X	ERC626X	ERC903X
ERC120X	ERC209X	ERC603X	ERC630X	ERC904X
ERC130X	ERC250X	ERC604X	ERC631X	ERC905X
ERC150X	ERC250XFHP	ERC605X	ERC652X	ERC907X
ERC151X	ERC251X	ERC606X	ERC700X	ERC908X
ERC152X	ERC251XFHP	ERC607X	ERC710X	ERC910X
ERC153X	ERC252X	ERC608X	ERC711X	ERC911X
ERC154X	ERC251XFHP	ERC609X	ERC712X	ERC912X
ERC155X	ERC253X	ERC610X	ERC713X	ERC913X
ERC175X	ERC254X	ERC611X	ERC720X	ERC914X
ERC176X	ERC255X	ERC612X	ERC725X	ERC915X
ERC177X	ERC256X	ERC613X	ERC730X	ERC916X
ERC178X	ERC257X	ERC614X	ERC731X	ERC917X
ERC179X	ERC258X	ERC615X	ERC731XFHP	ERC918X
ERC180X	ERC302X	ERC616X	ERC732X	ERC919X
ERC181X	ERC302X(IN)	ERC617X	ERC732XFHP	
ERC182X	ERC410XFL	ERC618X	ERC750X	
ERC183X	ERC411X	ERC618XALT	ERC751X	

SCHEDULE OF DRAWINGS	
DRAWING NO.	DESCRIPTION
CS1	COVER SHEET
CS2	BUILDING NOTES
CS3	APPENDIX B
S1	ELEVATIONS & NOTES
S2	FLOOR PLANS, DETAILS & NOTES
S3	FLOOR PLAN, CROSS SECTION & NOTES
F1	FOUNDATION PLANS & NOTES
F2	FOUNDATION PLAN, DETAILS & NOTES
F2	FOUNDATION DETAILS

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

GENERAL NOTES:

1. CONCRETE FOUNDATIONS AND FLOOR SLABS 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 191 SILICONE CAULK AND 1/2" WIDE BUTYL RUBBER TAPE SEALANT FOR ROOF INSTALLATION. USE DOW 199 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 ENGINEER'S 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 FRONT 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 318-14, 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 SPICES SHALL BE IN ACCORDANCE WITH ACI 318-14 CHAPTER 17, AND AS INDICATED ON THE DRAWINGS. WHERE SPICES ARE NOT CALLED OUT ON THE DRAWINGS, USE CLASS "B", BUT IN NO CASE SHALL ANY SPICE 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 SPICES.
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 (94-66) 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 RESPONSIBILITY 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 DOUELS, 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 CONTRACTOR'S 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 BRACINGS OR SUPPORT REQUIRED TO ACCOMMODATE THE CONTRACTOR'S 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 ENGINEER'S REVIEW OF SHOP DRAWINGS, PROJECT 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 318-14).
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 309 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 955 TYPE II 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, UNO.	#1 STONE (3/4" MAX)
II. GRADE SLABS AND EARTH FORMED ELEMENTS.	#1 STONE (1" MAX)
III. COARSE MASONRY GROUT REQUIRED	#1 STONE (3/4" MAX)
IV. FINE MASONRY GROUT REQUIRED	#9 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 3.41, 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 RATIO EXCEED THE FOLLOWING:

I. ALL FOUNDATION CONCRETE TO 3000 psi	0.55 MAX W/C RATIO
II. EXTERIOR FINISHING CONCRETE TO 3500 psi	0.52 MAX W/C RATIO
III. ALL EXPOSED C.I.P. WATERABLE, PIERS, ETC. TO 3500 psi	0.45 MAX W/C RATIO
III. SLABS ON GRADE TO 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, UNO, OTHER THAN FOOTINGS AND GRADE BEAMS.
12. FLOORS IN AREAS RECEIVING QUARRY TILE, CERAMIC TILE AND LIQUID FLOOR HARDENER SHALL BE CURED WITH DISSEIPATING LIQUID MEMBRANE CURING COMPOUND OR WET CURED BY USE OF MOISTURE RETAINING COVER. DISSEIPATING 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. DOUELS OR SPICES 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 FACILITATE 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 15.
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.

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 Limited Engineering License # D-0140

	DATE:	11/25/20
	DRAWN BY:	K. MACLAY
	SCALE:	AS NOTED
	APPROVED BY:	
REVISIONS	DATE	BY
PROJECT NAME: CONSOLIDATED SELF STORAGE		
PROJECT ADDRESS: BENSON, NORTH CAROLINA		
OWNER:	CONSOLIDATED OF NC	PROJECT NO.:
		NC20262
SHEET TITLE:	BUILDING NOTES	DRAWING NUMBER:
		CS2 of 3

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

Name of Project: Consolidated Self Storage
Address: Benson, NC
Zip Code 27592
Owner/Authorized Agent: Mark Manning

CONTACT:
DESIGNER: FIRM NAME LICENSE # TELEPHONE # E-MAIL
Architectural:
Civil:
Electrical:
Fire Alarm:
Plumbing:
Mechanical:
Sprinkler-Standpipe:
Structural:
Retaining Walls >5' High:
Other:

2018 NC BUILDING CODE: New Building
2018 NC EXISTING BUILDING CODE: 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: I, B
Sprinklers: Select one
Standpipes: Select one
Primary Fire District: Select one
Special Inspections Required: Select one

Table with 3 columns: FLOOR, EXISTING (SQ FT), NEW (SQ FT), SUB-TOTAL. Rows for Building 1, Building 2, Building 3, and TOTAL.

ALLOWABLE AREA
Primary Occupancy Classification(s): Storage - S-1
Accessories Occupancy Classification(s):
2018 NC Administrative Code and Policies

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:

Table with 5 columns: STORY NO., DESCRIPTION AND USE, (A) BLDG AREA PER STORY (ACTUAL), (B) TABLE 506.2* AREA, (C) AREA FOR FRONTAGE INCREASES, (D) ALLOWABLE AREA PER STORY OR UNLIMITED.

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 = 100(F/P - 0.25) x W/30 = (%)

ALLOWABLE HEIGHT
Table with 4 columns: ALLOWABLE, SHOWN ON PLANS, CODE REFERENCE. Rows for Building Height in Feet (Table 504.3) and Building Height in Stories (Table 504.4).

FIRE PROTECTION REQUIREMENTS
Table with 7 columns: BUILDING ELEMENT, FIRE SEPARATION DISTANCE (FEET), RATING, DETAIL # AND SHEET #, DESIGN # FOR RATED ASSEMBLY, SHEET # FOR RATED PENETRATION, SHEET # FOR RATED JOINTS.

2018 NC Administrative Code and Policies

Table with 2 columns: Item, Value. Rows for North, East, West, South, Interior walls and partitions, Floor Construction, Floor Ceiling Assembly, Columns Supporting Floor, Roof Construction, Roof Ceiling Assembly, Columns Supporting Roof, Shaft Enclosures - Bulk, Shaft Enclosures - Other, Corridor Separation, Occupancy/Fire Barrier Separation, Party Fire Wall Separation, Smoke Barrier Separation, Glass Partitions, Transoms/Dwelling Unit, Sleeping Unit Separation, Incidental Use Separation.

PERCENTAGE OF WALL OPENING CALCULATIONS
Table with 4 columns: 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

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- 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
Minimum 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 flooring and/or roof structure is provided for purposes of occupancy separation
Location of doors with panic hardware (1010.1.30)
Location of doors with electromagnetic 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)
Table with 7 columns: 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)
Table with 6 columns: LOT OR PARKING AREA, TOTAL # OF PARKING SPACES REQUIRED, TOTAL # OF PARKING SPACES PROVIDED, # OF ACCESSIBLE SPACES PROVIDED, # ACCESSIBLE SPACES WITH 5' ACCESS AISLE, # ACCESSIBLE SPACES WITH 13' ACCESS AISLE, TOTAL # ACCESSIBLE SPACES PROVIDED.

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)
Table with 10 columns: USE, WATERCLOSETS, URINALS, LAVATORIES, SHOWERS, DRINKING FOUNTAINS, SPACE, EXIST'G, NEW, REV'D.

SPECIAL APPROVALS
Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, etc., describe below)
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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. 143-118
Climate Zone: Select one
Method of Compliance: Select one

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:
Opening (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:

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2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESIGN LOADS:
Importance Factors: Snow (ls) 0.80, Seismic (ls) 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)=110 mph (ASCE 7-10), Exposure Category B, Wind Base Shear (MWFERS): Bldg 1: Vx=16.8 k, Vy=57.1 k; Bldg 2: Vx=16.8 k, Vy=57.1 k; Bldg 3: Vx=16.8 k, Vy=57.1 k.

SEISMIC DESIGN CATEGORY: B
Provide the following Seismic Design Parameters:
Risk Category (Table 1604.5) 1
Spectral Response Acceleration Sa=17.4 %
Site Classification (ASCE 7) D
Data Source: Presumptive
Basic structural system Building Frame
Seismic Base Shear: Bldg 1: Vx=0.488 k, Vy=0.488 k; Bldg 2: Vx=0.488 k, Vy=0.488 k; Bldg 3: Vx=0.488 k, Vy=0.488 k
Analysis Procedure: Equivalent Lateral Force
Architectural, Mechanical, Components anchored? Yes

LATERAL DESIGN CONTROL: Wind
SOIL BEARING CAPACITIES:
Presumptive Bearing Capacity 3000 psf
Pile size, type, and capacity

2018 NC Administrative Code and Policies

2018 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:

2018 NC Administrative Code and Policies

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
(ELECTRICAL DESIGN)
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

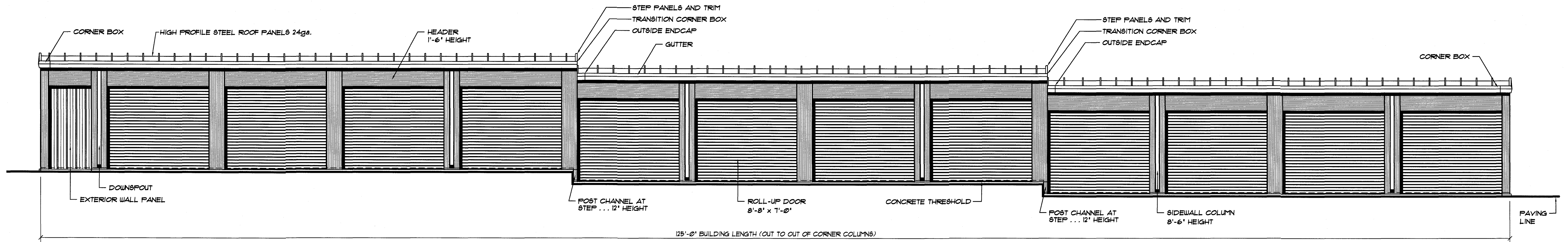
ELECTRICAL SUMMARY
ELECTRICAL SYSTEM AND EQUIPMENT

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 2018 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

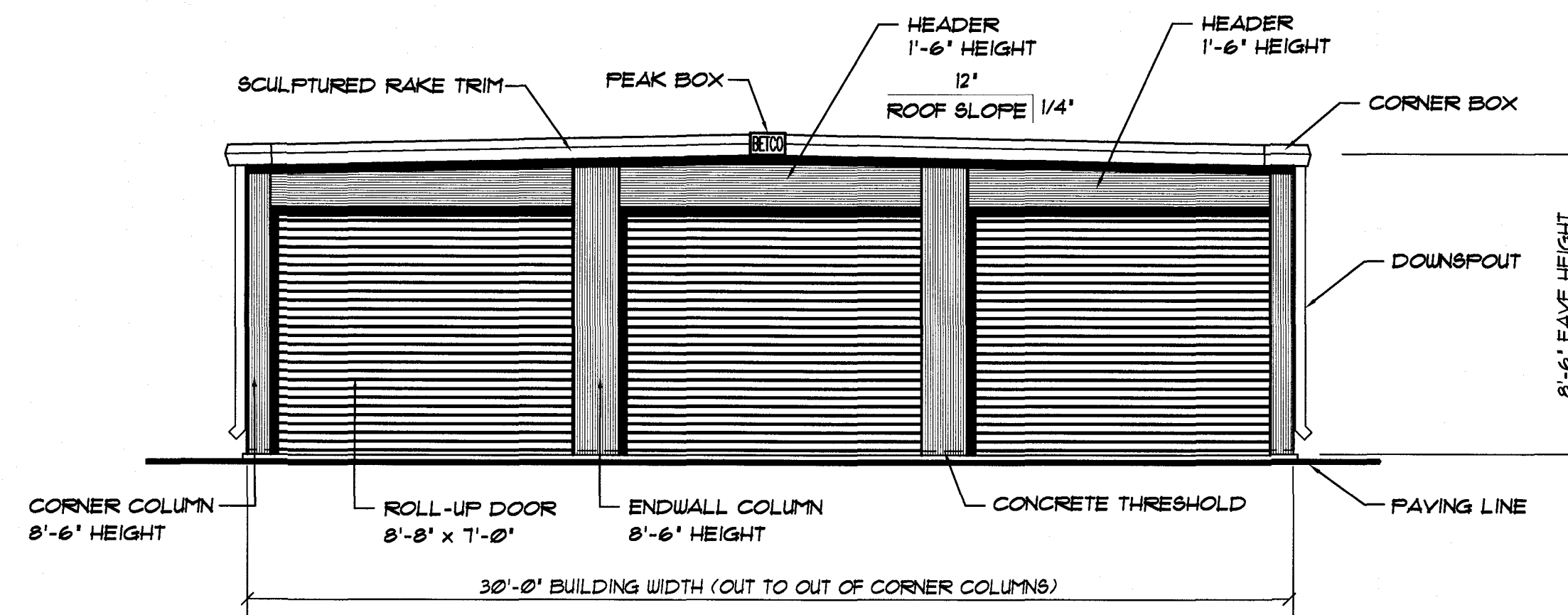
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Project information block including: DATE: 11/25/20, DRAWN BY: K. MACLAY, SCALE: AS NOTED, APPROVED BY: [Signature], PROJECT NAME: CONSOLIDATED SELF STORAGE, PROJECT ADDRESS: BENSON, NORTH CAROLINA, OWNER: CONSOLIDATED OF NC, PROJECT NO.: NC20262, SHEET TITLE: APPENDIX "B", DRAWING NUMBER: CS3 OF 3.



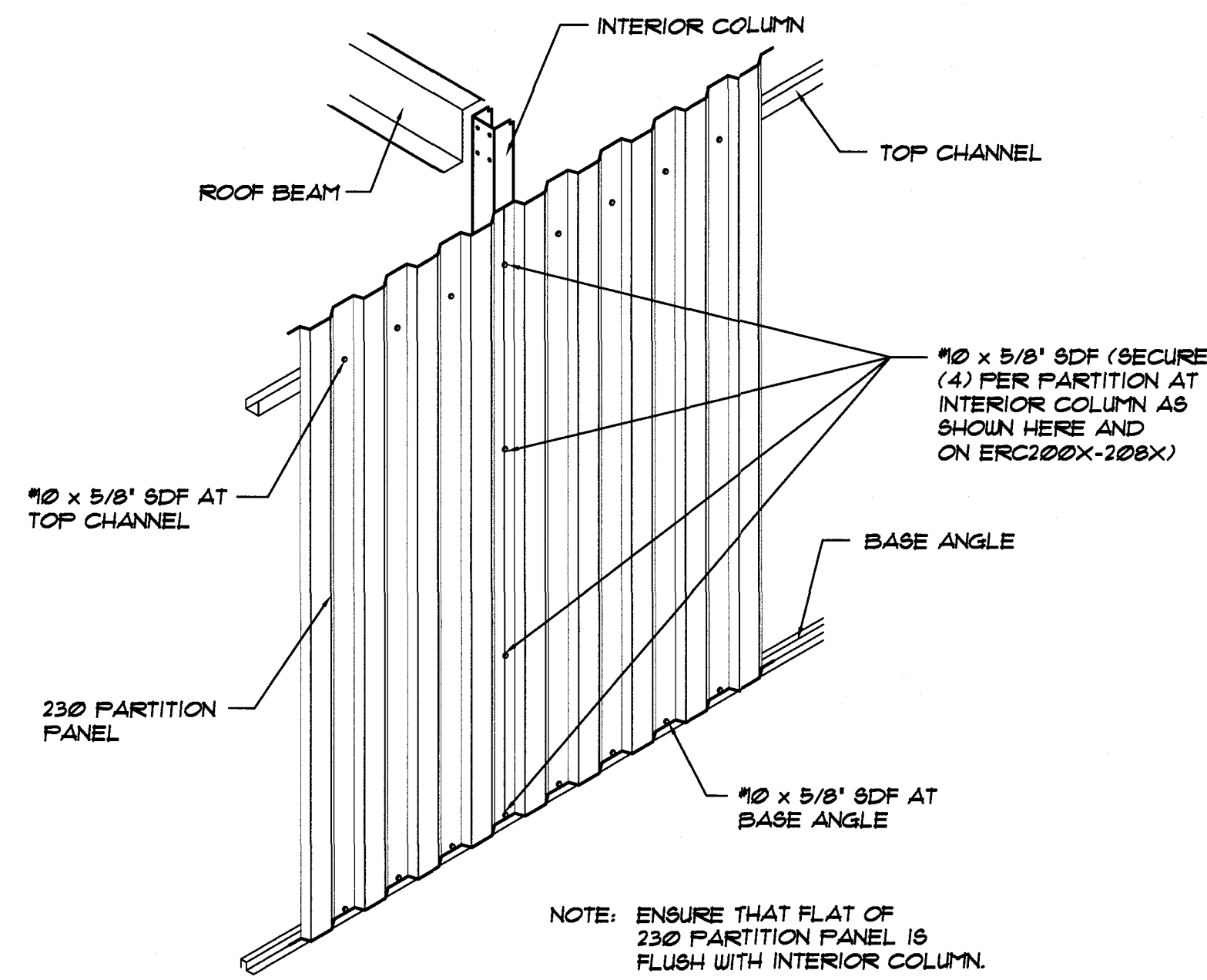
A SIDEWALL ELEVATION ... BUILDING "1"
 S1 SCALE: 1/4" = 1'-0"



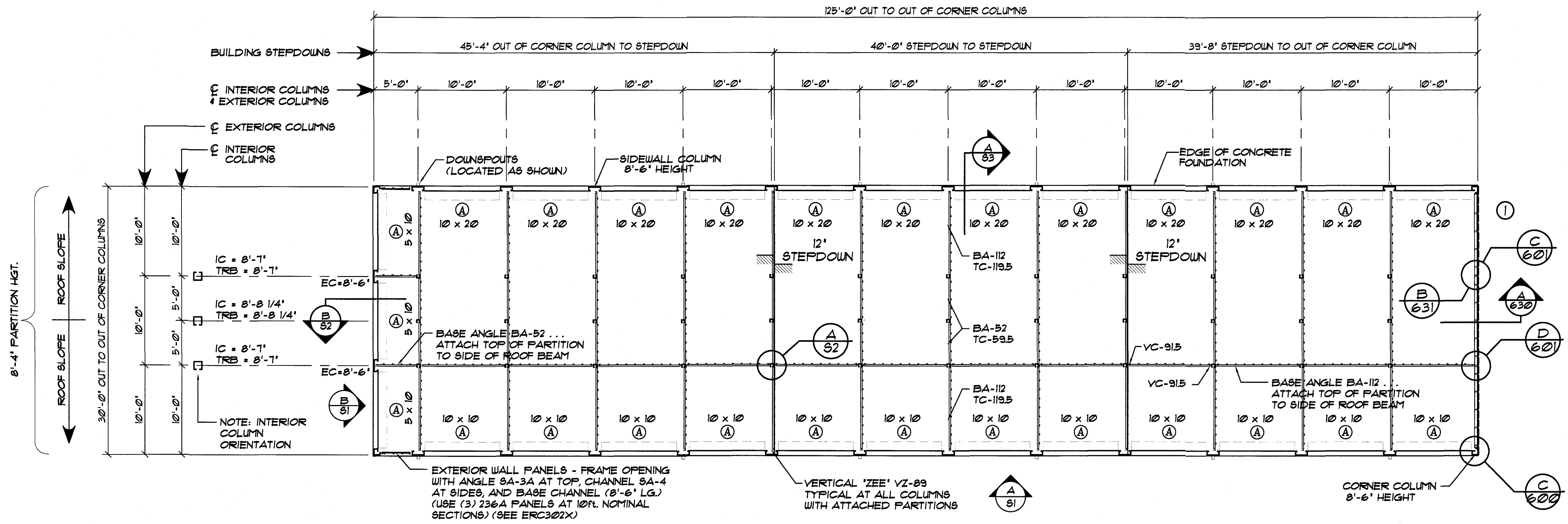
B ENDWALL ELEVATION ... BUILDING "1"
 S1 SCALE: 1/4" = 1'-0"

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	DATE:	11/26/20	<p>228 COMMERCE BLVD. STATESVILLE, NC 28625 (800) 654-7813</p>	PROJECT NAME:	CONSOLIDATED SELF STORAGE		
	DRAWN BY:	K. MACLAY		PROJECT ADDRESS:	BENSON, NORTH CAROLINA		
	SCALE:	AS NOTED		OWNER:	CONSOLIDATED OF NC	PROJECT NO.:	NC20262
	APPROVED BY:			SHEET TITLE:	ELEVATIONS & NOTES	DRAWING NUMBER:	S1 OF 3
REVISIONS	DATE	BY					



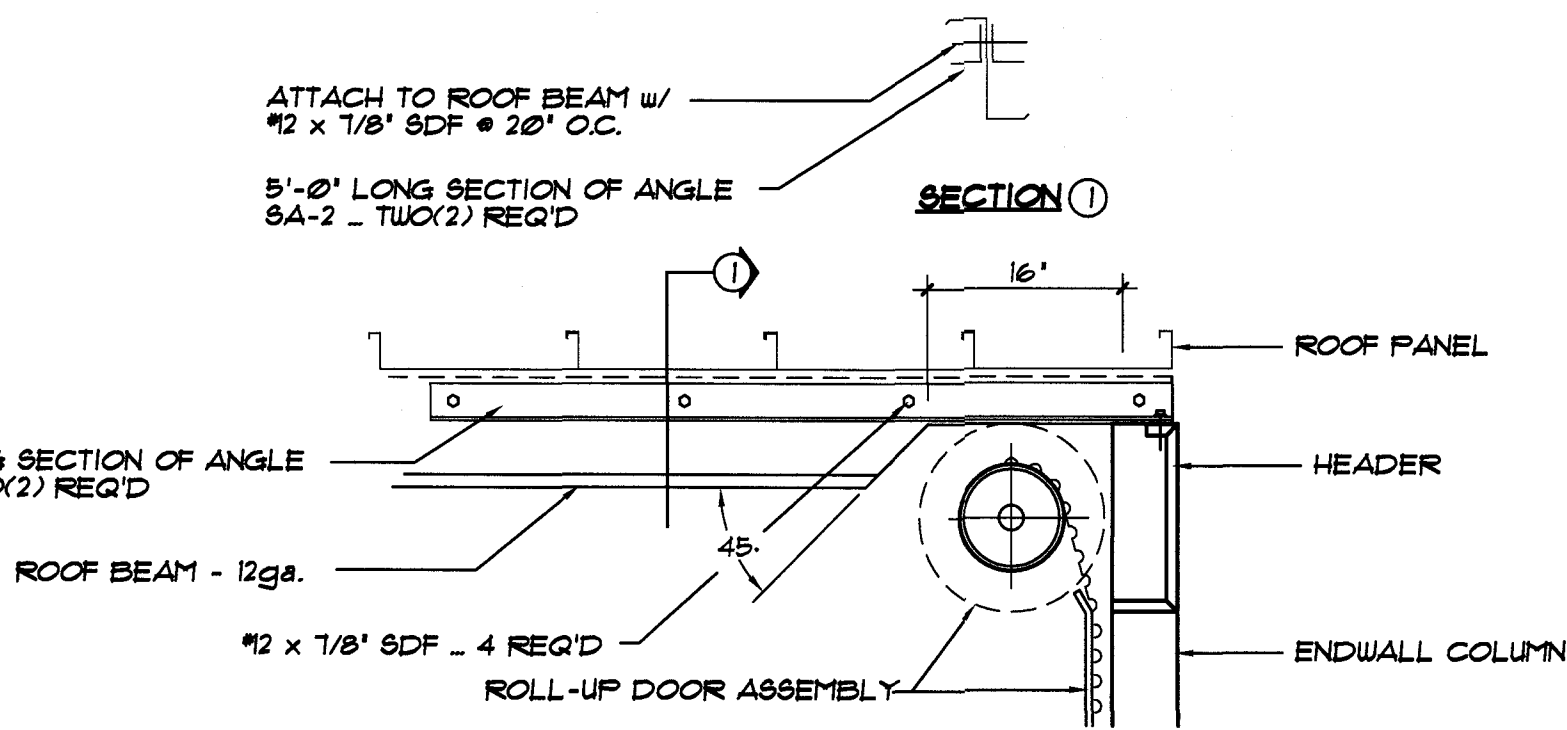
A
S2
PARTITION ATTACHMENT @ INTERIOR COLUMNS
NOT TO SCALE



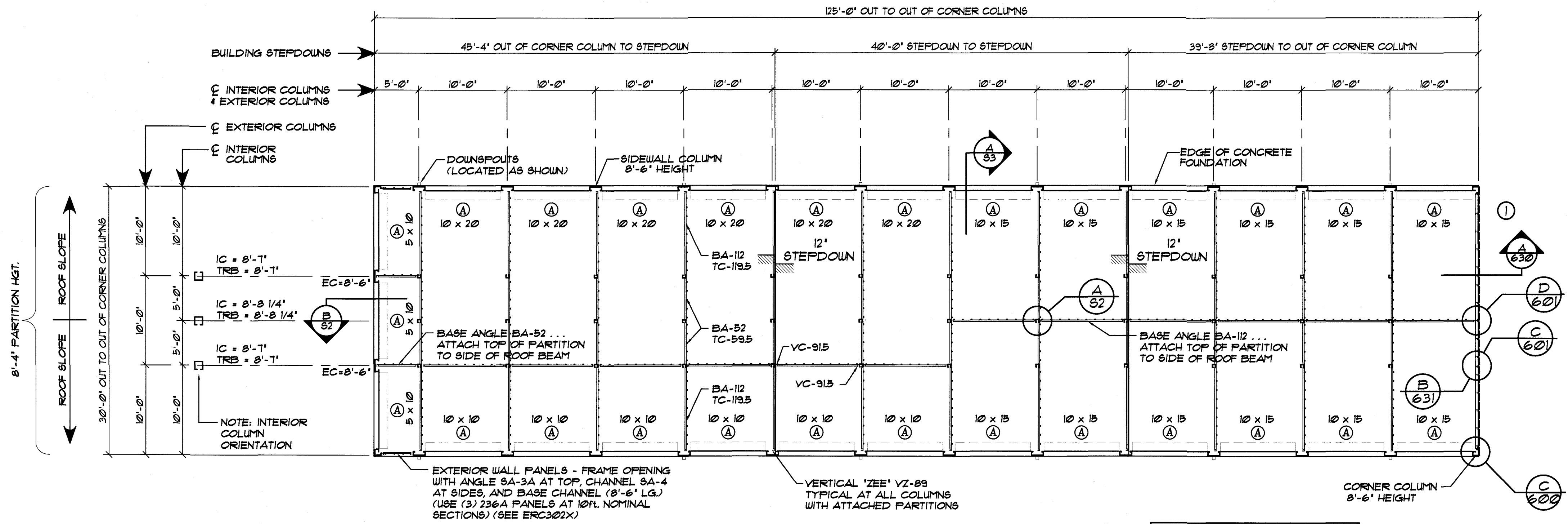
FLOOR PLAN... BUILDING #1
SCALE: 1/8" = 1'-0"

NOTE: BUILDING #1 IS PROVIDED W/(2) ADJUSTABLE CONTROL JOINT COLUMNS. 8'-6" HEIGHT

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



B
S2
INSTALLATION OF DOOR AT ROOF BEAM
NOTE... NOTCH BEAM & INSTALL ANGLE PRIOR TO ROOF INSTALLATION.
NOT TO SCALE



FLOOR PLAN... BUILDING #2
SCALE: 1/8" = 1'-0"

NOTE: BUILDING #2 IS PROVIDED W/(2) ADJUSTABLE CONTROL JOINT COLUMNS. 8'-6" HEIGHT

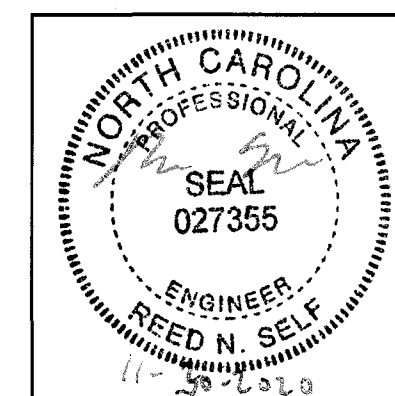
DOOR SCHEDULE		
ID	DOOR SIZE	TYPE
A	8'-8" x 7'-0"	EXTERIOR ROLL-UP

STUDWALL LEGEND		BUILDING # 1
EXTERIOR STUDWALL		
DESCRIPTION	UNINSULATED	
① EXTERIOR STUDWALL CONSTRUCTION AT FLAT SLAB (BLOCK @ MID-HGT.)	30 L.F.	
NOTE #1: SEE BLOCKING DETAIL A/631 ON ERC631X		
NOTE #2: SEE ERC610X FOR COMPLETE STUDWALL CONSTRUCTION DETAILS.		

STUDWALL LEGEND		BUILDING # 2
EXTERIOR STUDWALL		
DESCRIPTION	UNINSULATED	
① EXTERIOR STUDWALL CONSTRUCTION AT FLAT SLAB (BLOCK @ MID-HGT.)	30 L.F.	
NOTE #1: SEE BLOCKING DETAIL A/631 ON ERC631X		
NOTE #2: SEE ERC610X FOR COMPLETE STUDWALL CONSTRUCTION DETAILS.		

NOTE: SEE OWNER FOR BUILDING ORIENTATION ON SITE

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

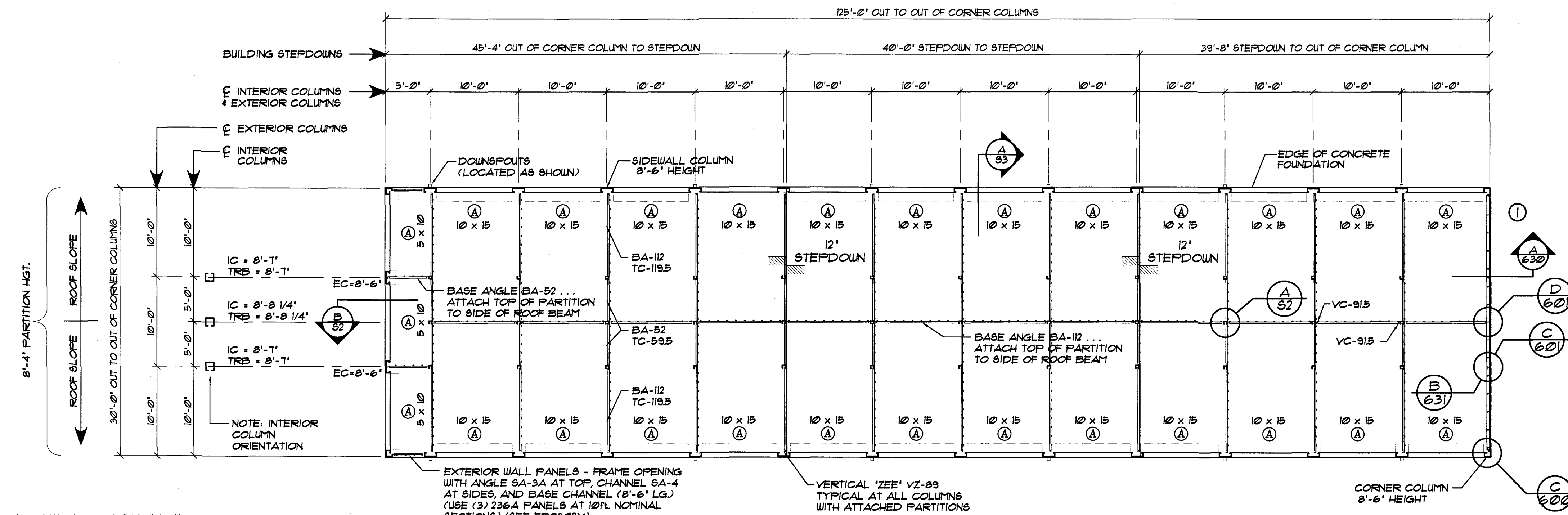


DATE:	11/25/20
DRAWN BY:	K. MACLAY
SCALE:	AS NOTED
APPROVED BY:	
REVISIONS:	
DATE:	
BY:	

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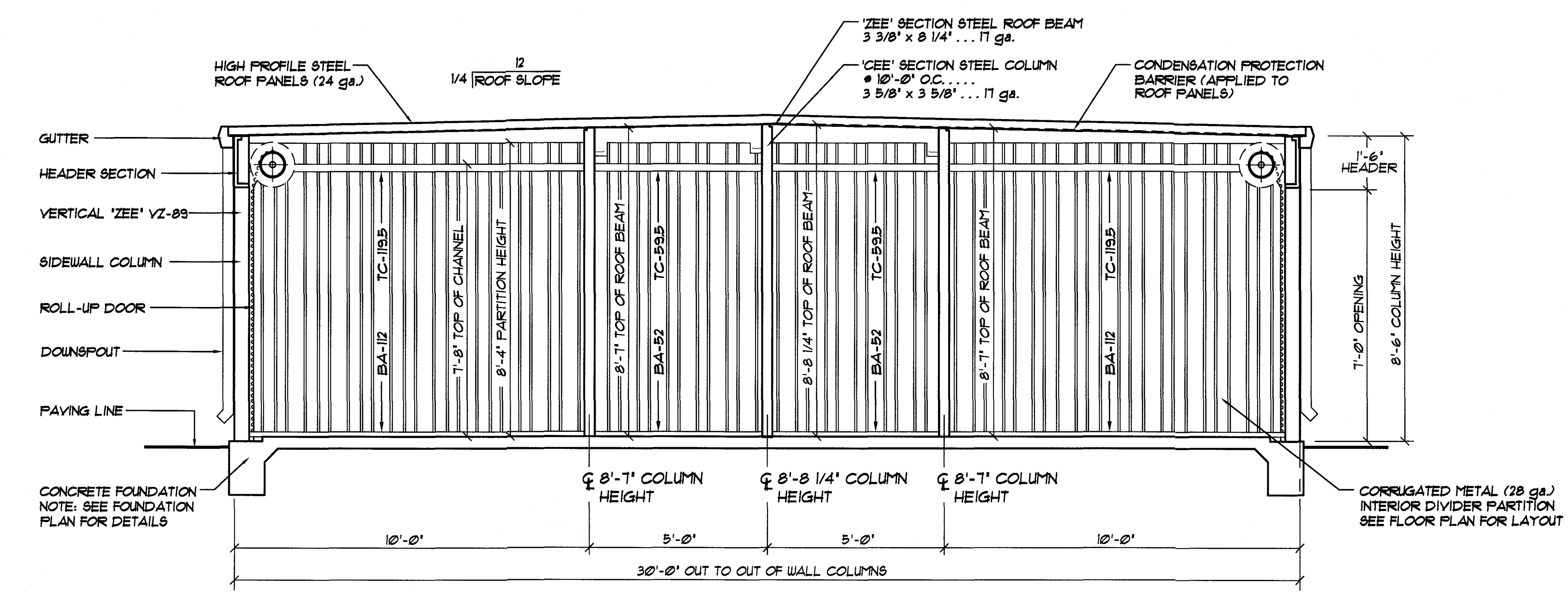
PROJECT NAME: CONSOLIDATED SELF STORAGE	
PROJECT ADDRESS: BENSON, NORTH CAROLINA	
OWNER: CONSOLIDATED OF NC	PROJECT NO.: NC20262
SHEET TITLE: FLOOR PLANS, DETAILS & NOTES	DRAWING NUMBER: S2 of 3



IC = INTERIOR COLUMN HEIGHT
 3 5/8" x 3 5/8" x 11 ga.
 TRB = TOP OF ROOF BEAM AFF.
 BA = BASE ANGLE
 TC = TOP CHANNEL
 VZ = VERTICAL 'ZEE'
 VZ = VERTICAL 'ZEE'

FLOOR PLAN... BUILDING "3"
 SCALE: 1/8" = 1'-0"

NOTE: BUILDING "3" IS PROVIDED
 W/(2) ADJUSTABLE CONTROL JOINT
 COLUMNS. 8'-6" HEIGHT



30'-0" WIDE CROSS SECTION... BUILDINGS "1", "2" & "3"
 SCALE: 3/8" = 1'-0"

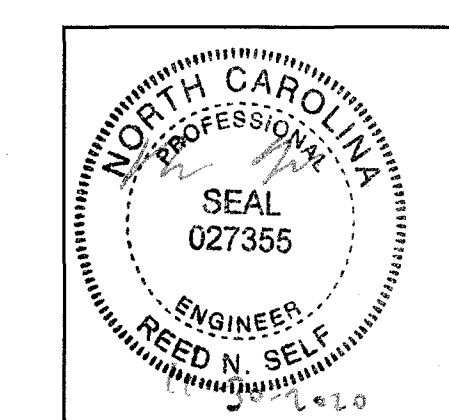
DOOR SCHEDULE	
ID	DOOR SIZE
A	8'-8" x 7'-0"

STUDWALL LEGEND	
BUILDING # 3	
EXTERIOR STUDWALL	
DESCRIPTION	UNINSULATED
① EXTERIOR STUDWALL CONSTRUCTION AT FLAT SLAB (BLOCK @ MID-HGT.)	30 L.F.

NOTE #1: SEE BLOCKING DETAIL A/631 ON ERC631X
 NOTE #2: SEE ERC610X FOR COMPLETE STUDWALL CONSTRUCTION DETAILS.

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

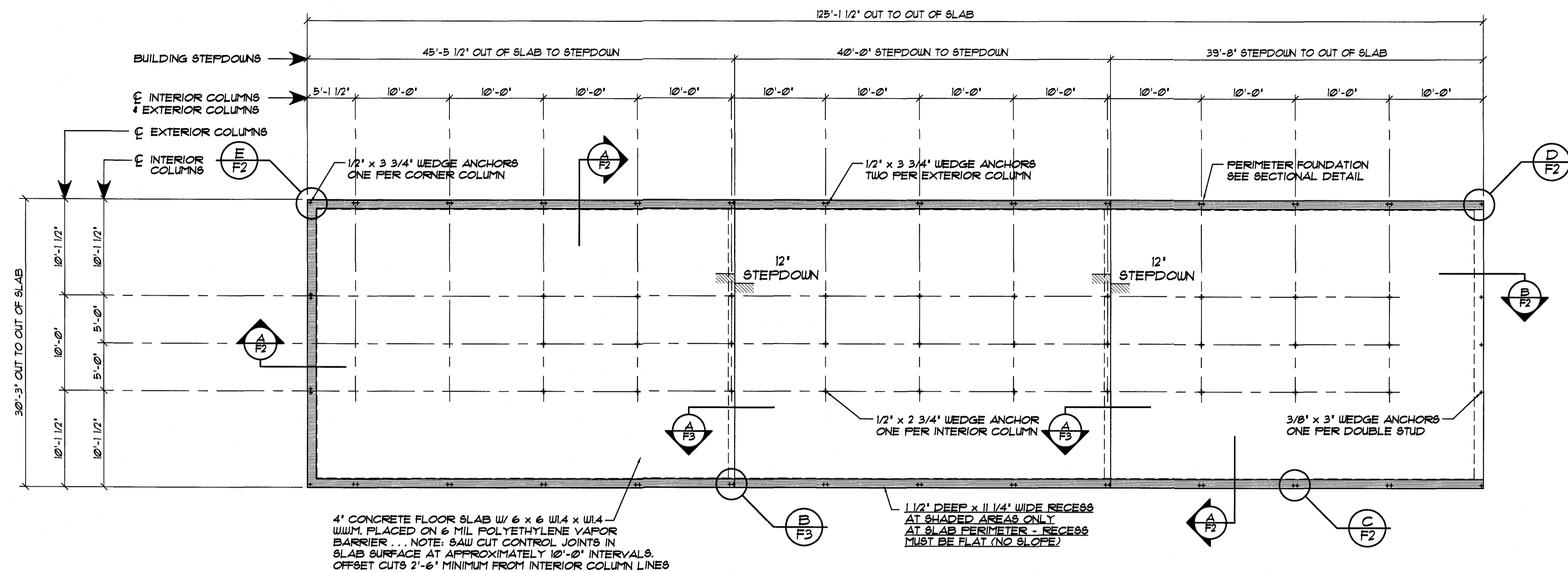
NOTE:
 UNIT SIZES SHOWN ARE NOMINAL. ACTUAL CLEAR DIMENSIONS INSIDE UNITS MAY VARY ACCORDING TO FINAL DESIGN OF COMPONENTS.



DATE:	11/25/20
DRAWN BY:	K. MACLAY
SCALE:	AS NOTED
APPROVED BY:	
REVISIONS	DATE BY



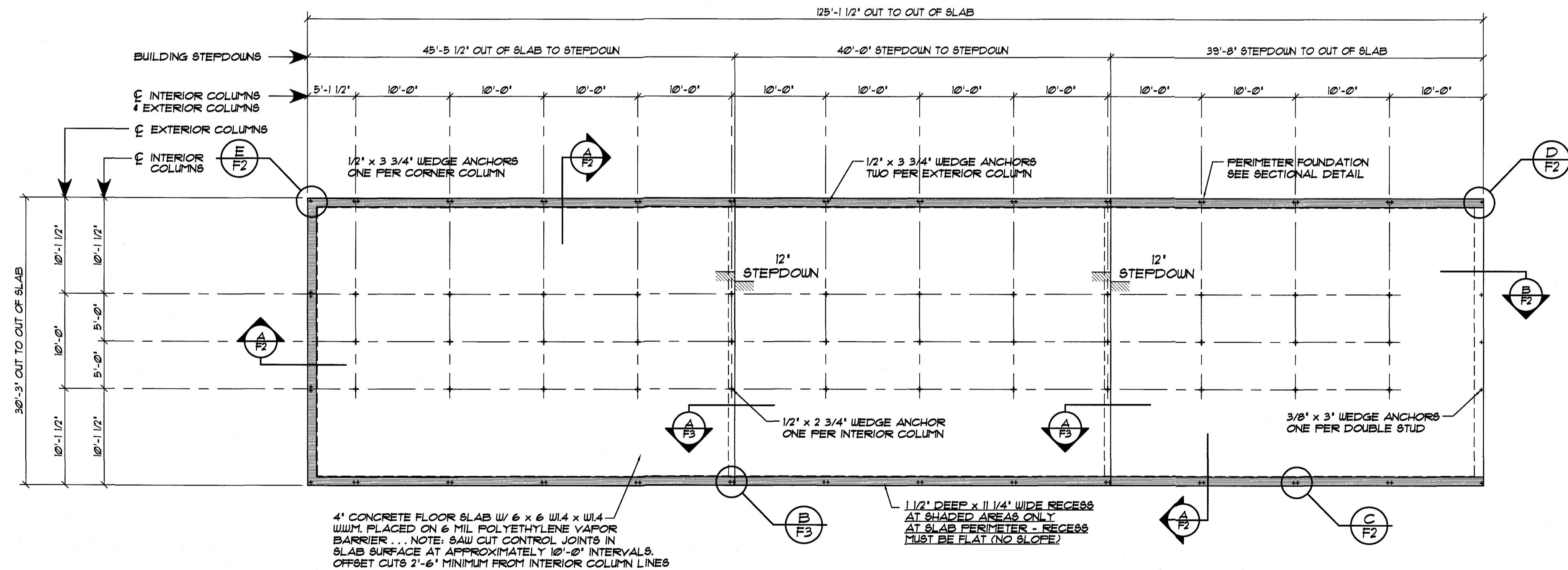
BETCO, Inc. 228 Commerce Blvd. Statesville, NC 28625 Limited Engineering License # D-0140	
PROJECT NAME:	CONSOLIDATED SELF STORAGE
PROJECT ADDRESS:	BENSON, NORTH CAROLINA
OWNER:	CONSOLIDATED OF NC
PROJECT NO.:	NC20262
SHEET TITLE:	FLOOR PLAN, CROSS SECTION & NOTES
DRAWING NUMBER:	S3 of 3



FOUNDATION PLAN... BUILDING "1"

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.



FOUNDATION PLAN... BUILDING "2"

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 4.2.1
EXPOSURE CATEGORIES AND CLASSES**

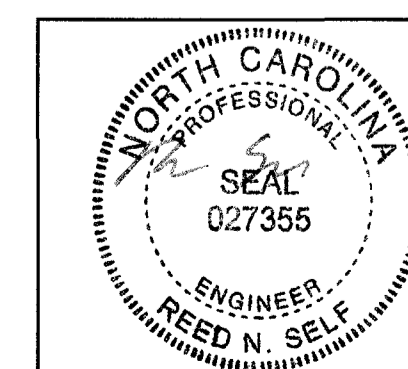
CATEGORY	SEVERITY	CLASS	CONDITION	
F FREEZING AND THAWING	NOT APPLICABLE	F0	CONCRETE NOT EXPOSED TO FREEZING- AND-THAWING CYCLES	
S SULFATE	NOT APPLICABLE	S0	WATER-SOLUBLE SULFATE (SO ₄) IN SOIL, PERCENT BY WEIGHT	DISSOLVED SULFATE (SO ₄) IN WATER, ppm
			SO ₄ < 0.10	SO ₄ < 150
P REQUIRING LOW PERMEABILITY	NOT APPLICABLE	P0	IN CONTACT WITH WATER WHERE 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 - TABLE 4.3.1 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.

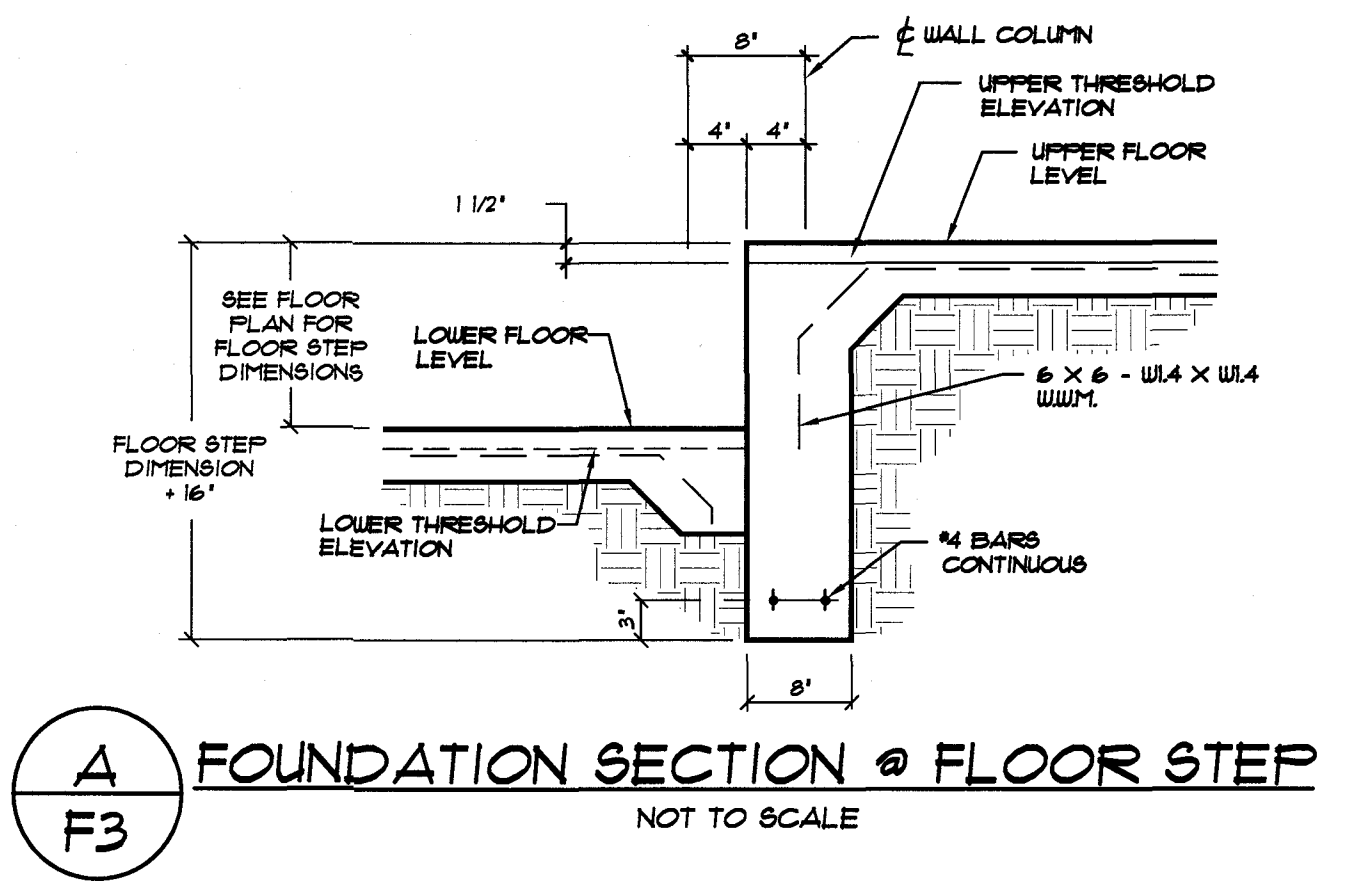


DATE:	11/25/20
DRAWN BY:	K. MACLAY
SCALE:	AS NOTED
APPROVED BY:	
REVISIONS	DATE BY

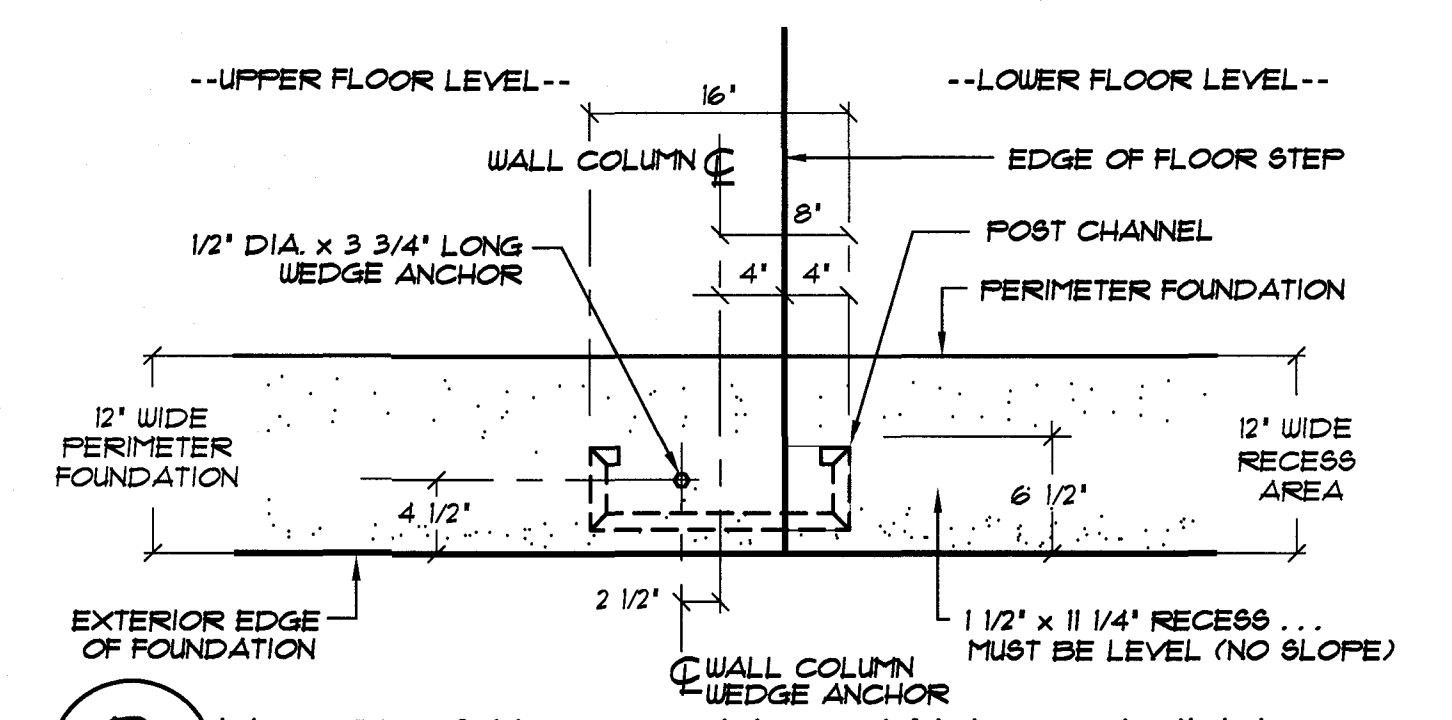


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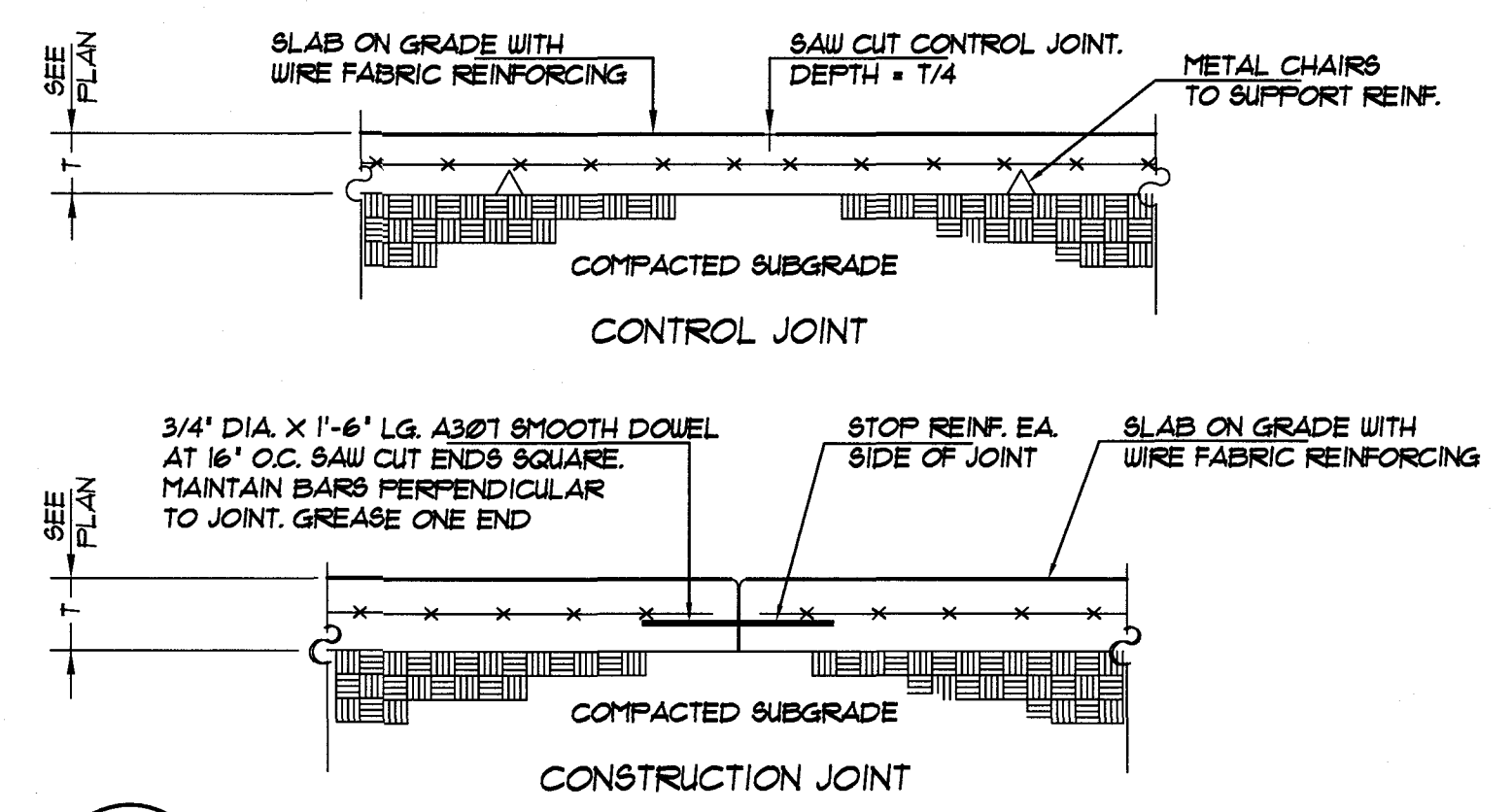
PROJECT NAME:	CONSOLIDATED SELF STORAGE	
PROJECT ADDRESS:	BENSON, NORTH CAROLINA	
OWNER:	CONSOLIDATED OF NC	PROJECT NO.: NC20262
SHEET TITLE:	FOUNDATION PLANS & NOTES	DRAWING NUMBER: F1 OF 3



A FOUNDATION SECTION @ FLOOR STEP
F3 NOT TO SCALE



B FLOOR STEPDOWN @ WALL COLUMN
F3 NOT TO SCALE



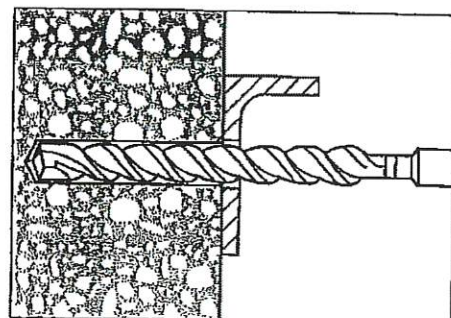
C CONTROL JOINT & CONSTRUCTION JOINT IN CONCRETE SLAB
F3 NOT TO SCALE

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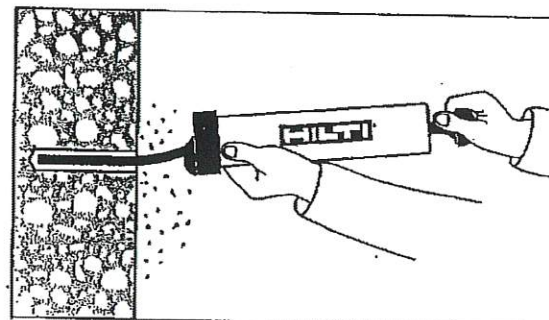
	DATE:	11/25/20		PROJECT NAME:	CONSOLIDATED SELF STORAGE		
	DRAWN BY:	K. MACLAY		PROJECT ADDRESS:	BENSON, NORTH CAROLINA		
	SCALE:	AS NOTED		OWNER:	CONSOLIDATED OF NC	PROJECT NO.:	NC20262
	APPROVED BY:			SHEET TITLE:	FOUNDATION DETAILS	DRAWING NUMBER:	F3 of 3
REVISIONS		DATE	BY	228 COMMERCE BLVD. STATESVILLE, NC 28625 (800) 654-7813			

NC20262

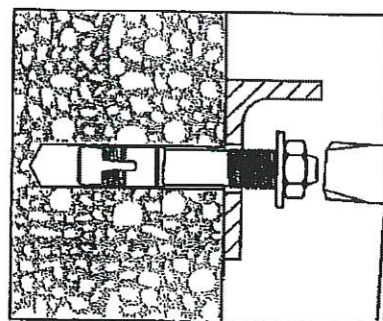
Kwik Bolt 3 Expansion Anchor Installation Instructions



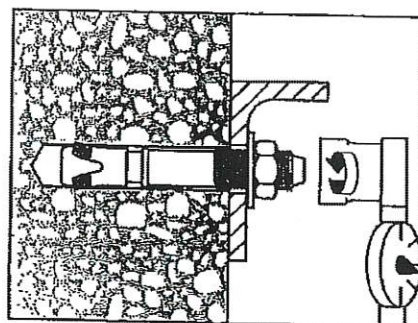
1. Hammer drill a hole to the same nominal diameter as the Kwik Bolt 3. The hole depth must exceed the anchor embedment by at least one diameter. The fixture may be used as a drilling template to ensure proper anchor location.



2. Clean hole.



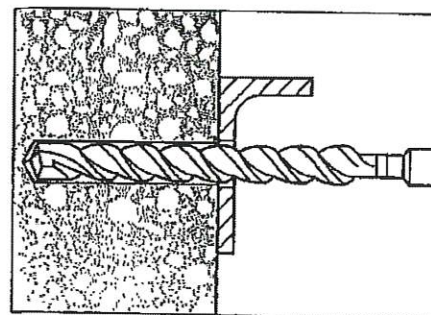
3. Drive the Kwik Bolt 3 into the hole using a hammer. The anchor must be driven until at least six threads are below the surface of the fixture.



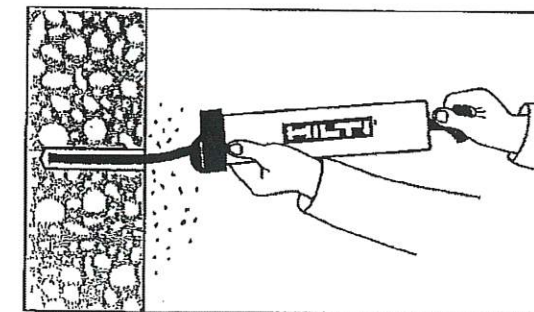
4. Tighten the nut to the recommended installation torque.

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

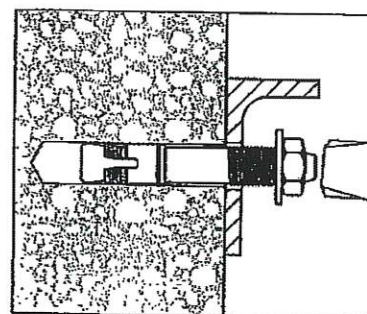
Kwik Bolt TZ Anchor Installation Instructions into normal-weight and lightweight concrete



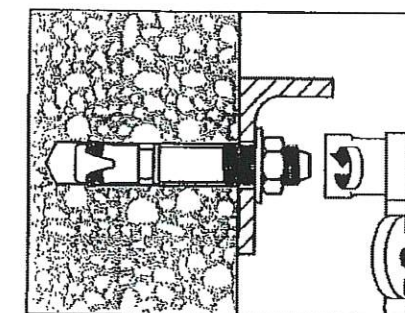
1. Hammer drill a hole to the same nominal diameter as the Kwik Bolt TZ. The hole depth must exceed the anchor embedment by at least 1/4 inch. The fixture may be used as a drilling template to ensure proper anchor location.



2. Clean hole.

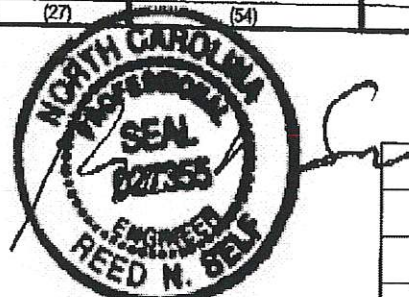


3. Drive the Kwik Bolt TZ into the hole using a hammer. The anchor must be driven until at least 4 threads are below the surface of the fixture.



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)



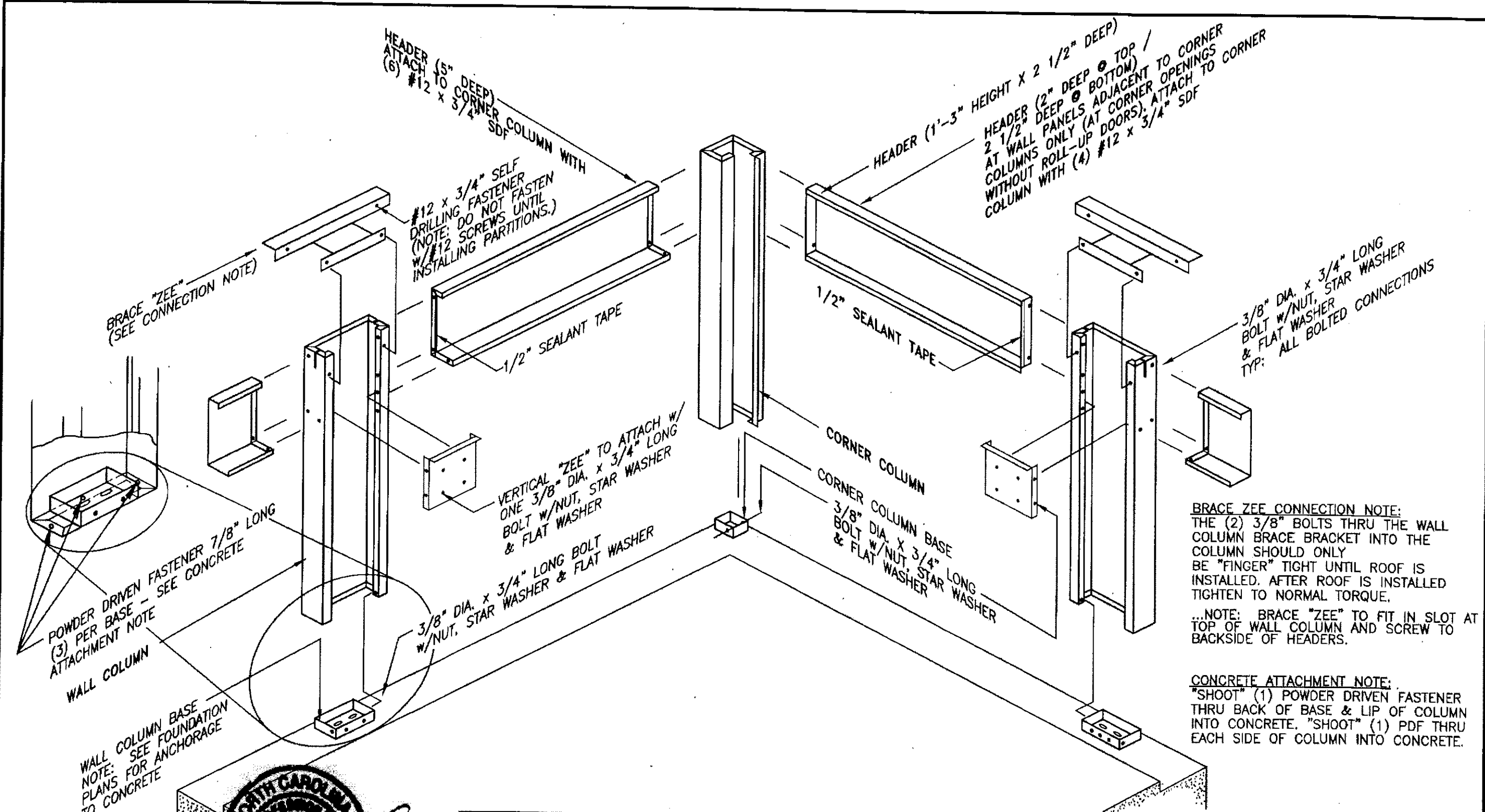
5-26-16

REVISIONS	DATE	BY



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	



HEADER (5" DEEP)
ATTACH TO CORNER
(6) #12 x 3/4" SDF COLUMN WITH

HEADER (1'-3" HEIGHT x 2 1/2" DEEP)
2 1/2" DEEP @ TOP /
2 1/2" DEEP @ BOTTOM
AT WALL PANELS ADJACENT TO CORNER
COLUMNS ONLY (AT CORNER OPENINGS
WITHOUT ROLL-UP DOORS), ATTACH TO CORNER
COLUMN WITH (4) #12 x 3/4" SDF

#12 x 3/4" SELF
DRILLING FASTENER
(NOTE: DO NOT FASTEN
W/ #12 SCREWS UNTIL
INSTALLING PARTITIONS.)

BRACE "ZEE"
(SEE CONNECTION NOTE)

1/2" SEALANT TAPE

1/2" SEALANT TAPE

3/8" DIA. x 3/4" LONG
BOLT W/ NUT, STAR WASHER
& FLAT WASHER
TYP: ALL BOLTED CONNECTIONS

VERTICAL "ZEE" TO ATTACH W/
ONE 3/8" DIA. x 3/4" LONG
BOLT W/ NUT, STAR WASHER
& FLAT WASHER

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

CORNER COLUMN

CORNER COLUMN BASE
3/8" DIA. x 3/4" LONG
BOLT W/ NUT, STAR WASHER
& FLAT WASHER

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.

POWDER DRIVEN FASTENER 7/8" LONG
(3) PER BASE - SEE CONCRETE
ATTACHMENT NOTE

WALL COLUMN

WALL COLUMN BASE
NOTE: SEE FOUNDATION
PLANS FOR ANCHORAGE
TO CONCRETE



5-26-16

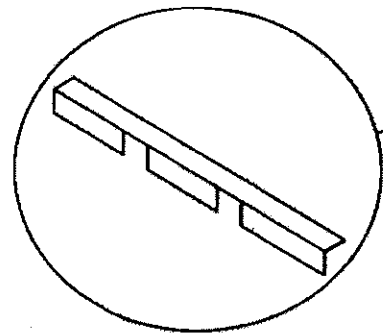
REVISIONS	DATE	BY

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STATESVILLE, NC 28625
(800)654-7813

SHEET TITLE: PERIMETER WALL ASSEMBLY All Eave Heights		
DRAWN BY: J Pope	APPROVED BY:	DRAWING NUMBER: ERC100X
SCALE: NTS	DATE: 6/17/94	

CONTROL JOINT BRACE (S20139)
 ATTACH TO HEADERS w/(2)
 #12 x 1/8" 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

1/8" P.D.F. (2) EA. SIDE

#12 x 1/8" SDF

FIELD CUT ANGLE SA-2 FOR
 VERTICAL 'ZEE' ATTACHMENT
 AT WALL COLUMNS. POSITION
 ACCORDING TO 'VZ' LENGTH
 FASTEN TO C.J. COLUMN w/(2)
 #12 x 1/8" SDF EA. END...

CONTROL JOINT COLUMN (HALF)

FIELD CUT ANGLE SA-2 FOR
 VERTICAL 'ZEE' ATTACHMENT
 AT BASE OF COLUMN...
 'SHOOT' TO FOUNDATION
 w/(2) 1/8" P.D.F. ...

#12 x 1/8" SDF
 (4) PER ANGLE

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

C.J.C. EXPANSION TRIM
 #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 1/8"
 SDF EACH END
 (SEE ISOMETRIC VIEW)

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

CONTROL JOINT COLUMN (HALF)

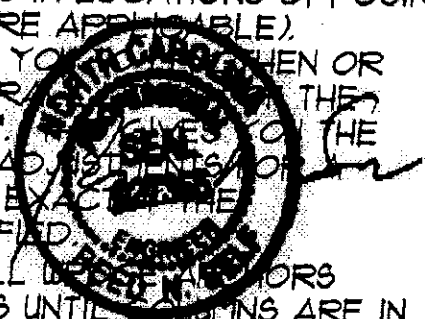
C.J.C. EXPANSION TRIM
 BRACKET... (2) REQUIRED...
 (1) AT 1/3 OF COLUMN HGT.
 & (1) AT 2/3 OF COLUMN HGT.

#12 x 1/8" SDF
 (2) PER BRACKET

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'. THE C.J.C.'S HAVE THE
 ABILITY TO MAKE ADJUSTMENTS TO THE
 SLAB THAT IS NOT EXACT TO THE
 DIMENSIONS SPECIFIED.

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



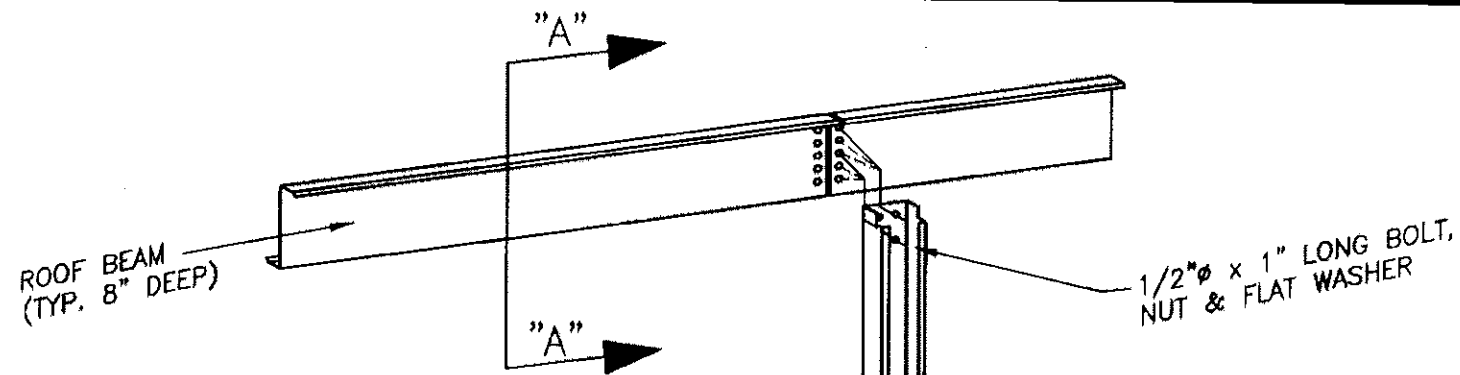
5-26-16

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



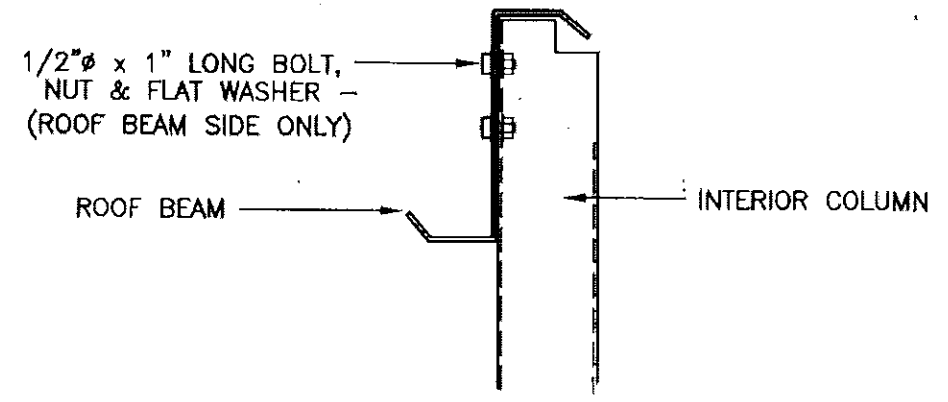
228 COMMERCE BLVD.
 STATESVILLE, NC 28625
 (800)654-7813

SHEET TITLE:		
CONTROL JOINT COLUMN AND TRIM INSTALLATION		
DRAWN BY: K.D.W.	APPROVED BY:	DRAWING NUMBER:
SCALE: NTS	DATE: 8/1/94	ERC105X



INTERIOR COLUMN
3 5/8" x 3 5/8" x 17 GA

1/2"φ x 1" LONG BOLT,
NUT & FLAT WASHER

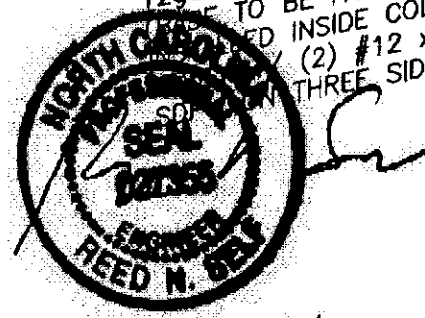


SECTION
"A" - "A"

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

12ga. INTERIOR COLUMN BASE
TO BE FACTORY
WELDED INSIDE COLUMN
(2) #12 x 7/8"
(THREE SIDES.)

12ga. INTERIOR COLUMN BASE PLATE
(INSTALLED WITH BASE AT FACTORY)



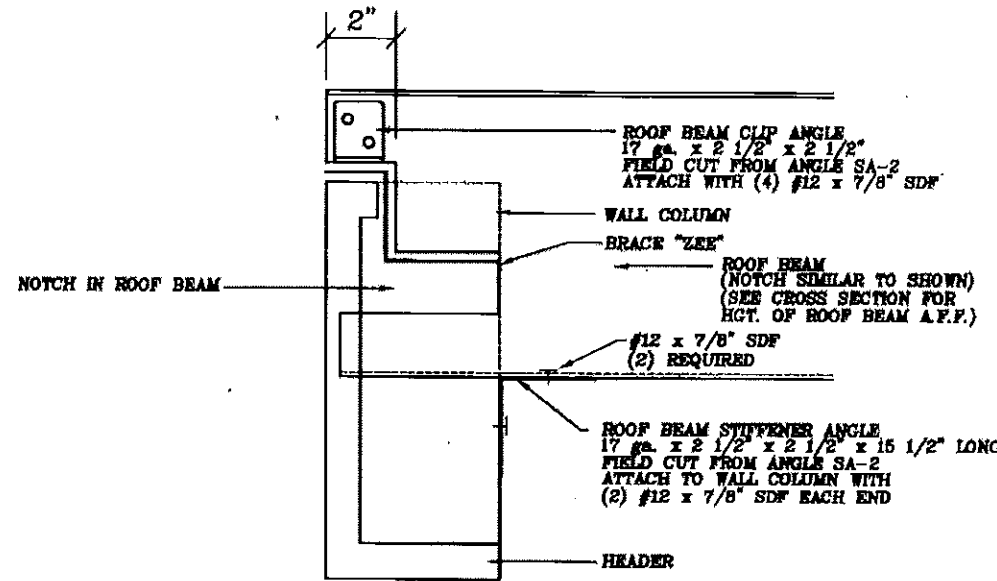
5-26-16

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

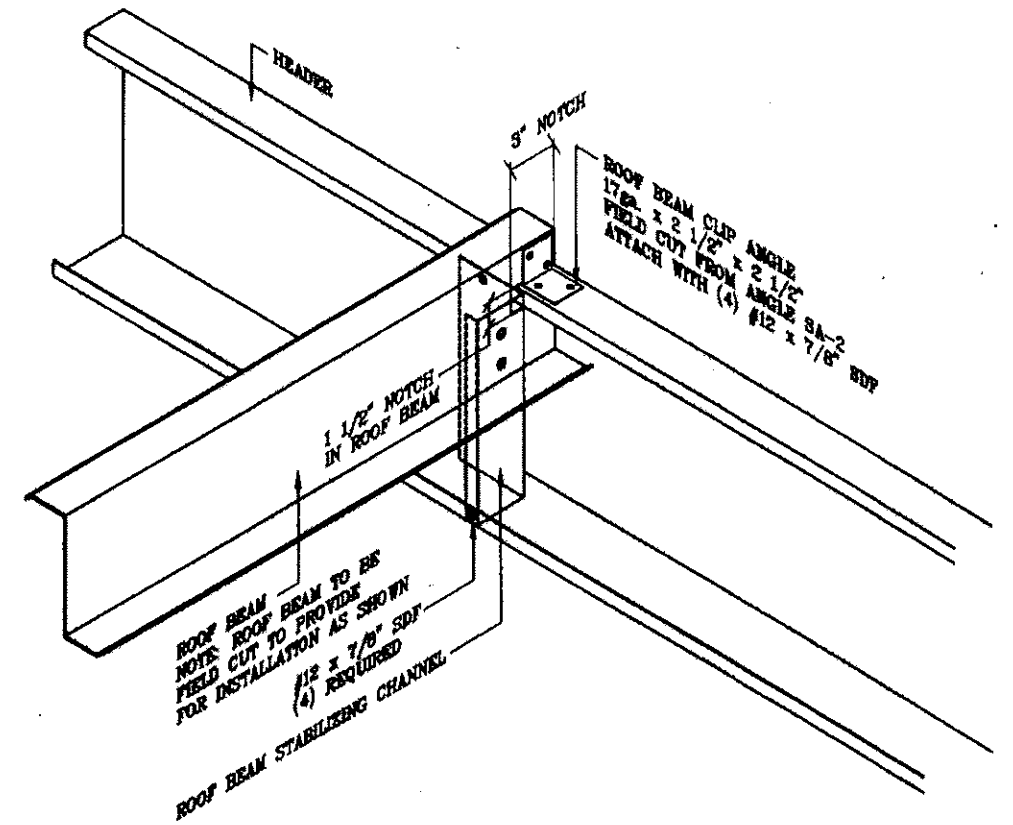
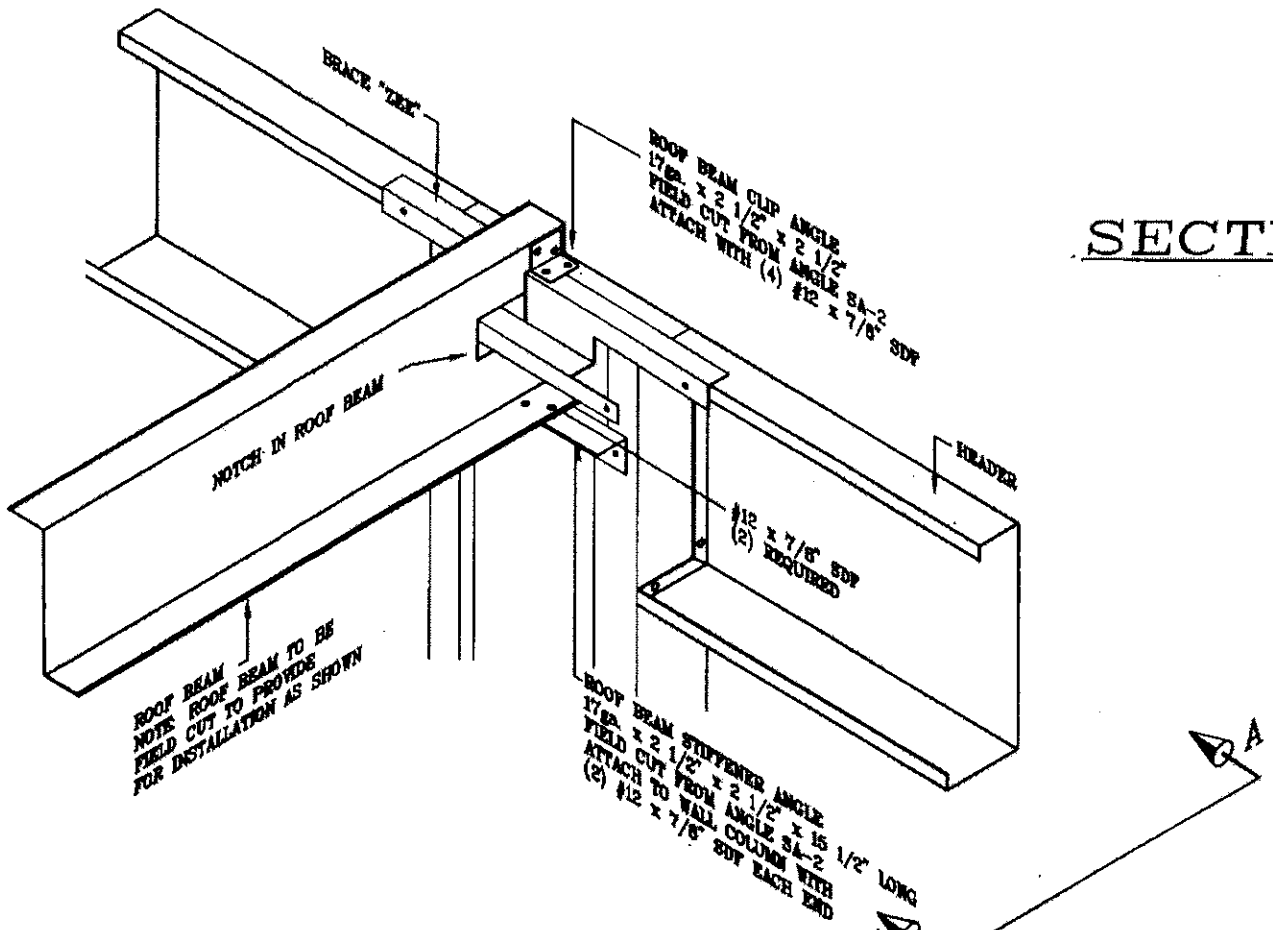
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STATESVILLE, NC 28625
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SHEET TITLE: <i>Interior Column Installation All Heights</i>		
DRAWN BY: J POPE	APPROVED BY:	DRAWING NUMBER: ERC110X
SCALE: NTS	DATE: 1/30/98	

BRACE "ZEE" INSTALLATION
 THE (2) 3/8" BOLTS THRU THE BRACE "ZEE" INTO THE WALL 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 HEADER...



NOTE:
 REFER TO BUILDING CROSS SECTION DRAWING FOR DIMENSION FROM FINISHED FLOOR ELEVATION TO TOP OF ROOF BEAM NOTCH AND SET ROOF BEAM AT THE HEIGHT SHOWN ON CROSS SECTION SO THAT THE ROOF BEAM IS LEVEL FOR THE ENTIRE LENGTH OF BUILDING.



ROOF BEAM AT COLUMN

ROOF BEAM AT HEADER



5-26-16

REVISIONS	DATE	BY
△ REVISED FASTENER SIZE	1/15/03	JCM
△ MODIFIED NOTCH IN ROOF BEAM	3/9/99	FOX

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SHEET TITLE: Roof Beam Assembly Details		
DRAWN BY: B.D.	APPROVED BY:	DRAWING NUMBER: ERC115X
SCALE: NTS	DATE: 5/8/98	

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

SA-2 (16" LONG)
 SECURE TO COLUMN w/ (1)
 #12 x 7/8" SDF AT EACH FLANGE
 FASTEN TO ROOF BEAM w/ (2)
 #12 x 7/8" SDF

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

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

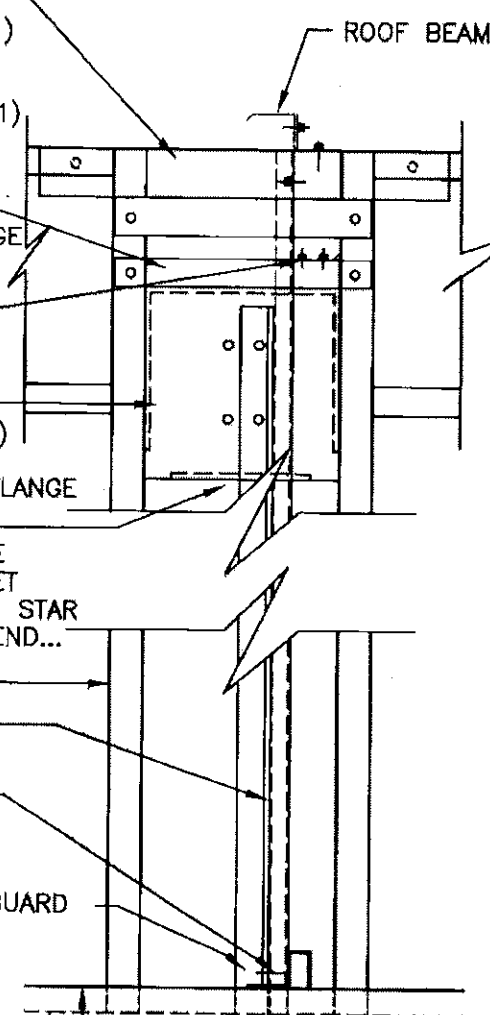
VERTICAL "ZEE"
 ...FASTEN TO WALL COLUMN BASE
 AND TO DOOR MOUNTING BRACKET
 w/(1) 3/8"φ x 3/4" BOLT, NUT, STAR
 WASHER & FLAT WASHER EACH END...

WALL COLUMN

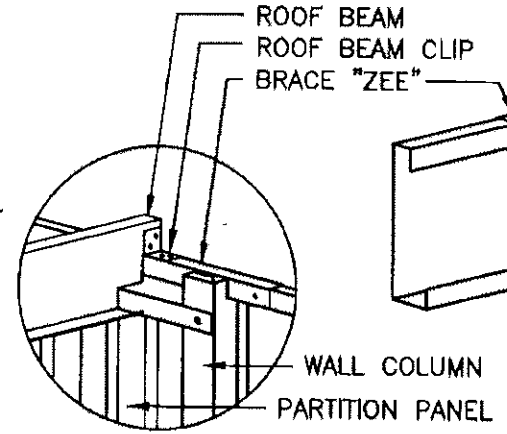
PARTITION PANEL
 (30" COVERAGE)

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

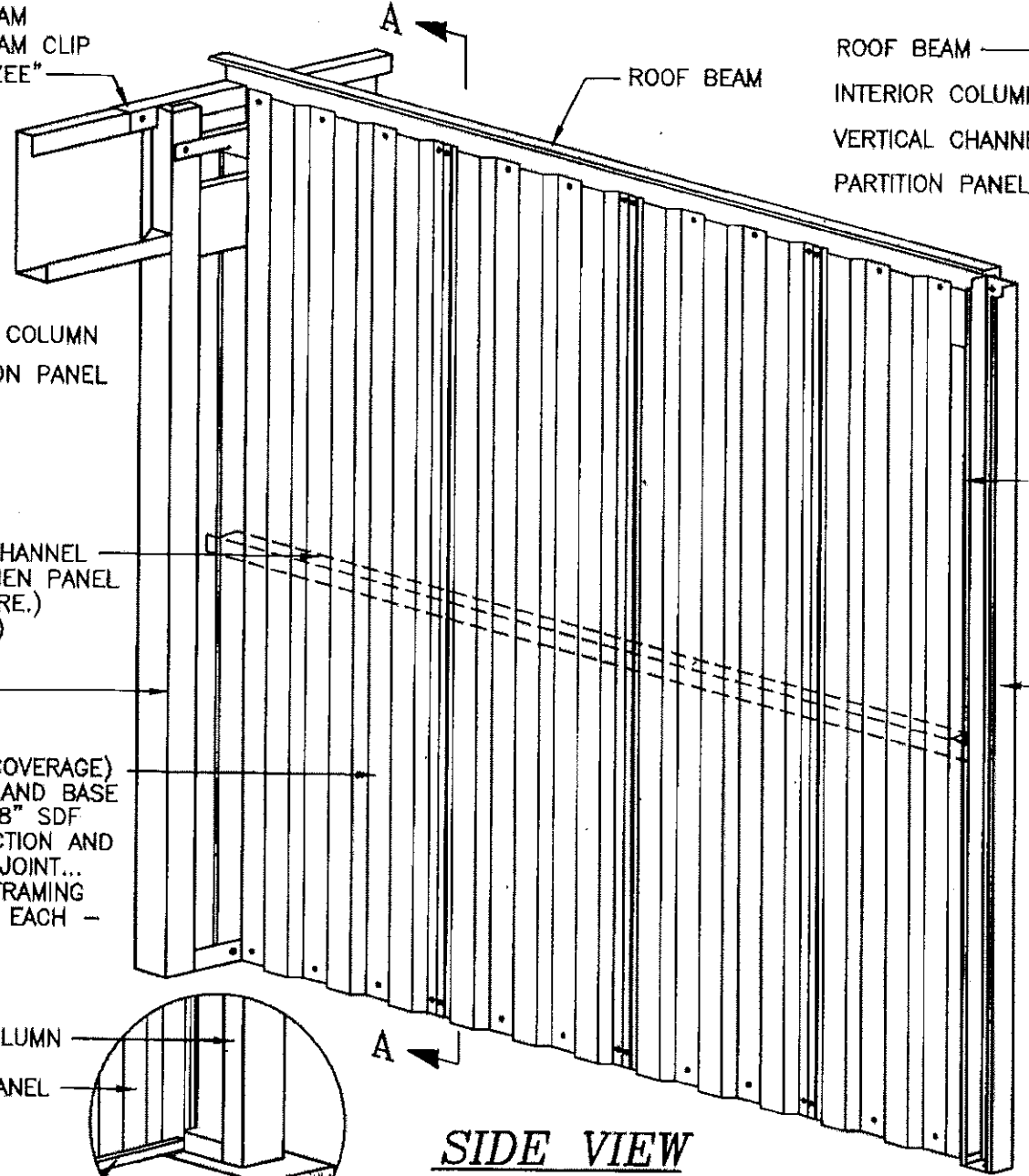
BASE ANGLE BA-112 w/SCREW GUARD
 "SHOOT" TO FOUNDATION
 w/(4) 7/8" POWDER
 DRIVEN FASTENERS...



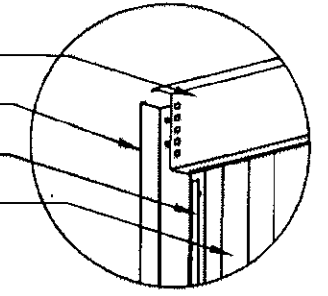
SECTION A-A



**OPPOSITE VIEW
THIS CORNER**



SIDE VIEW

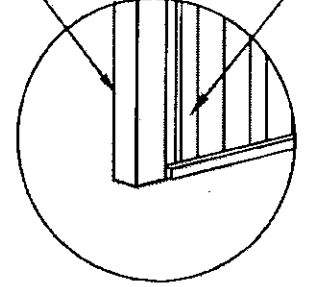


**OPPOSITE VIEW
THIS CORNER**

VERTICAL CHANNEL
 FASTEN TO INTERIOR
 COLUMN w/ (4)
 #10 x 5/8" SDF
 (SEE NOTE)

INTERIOR COLUMN

INTERIOR COLUMN
 PARTITION PANEL



**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)

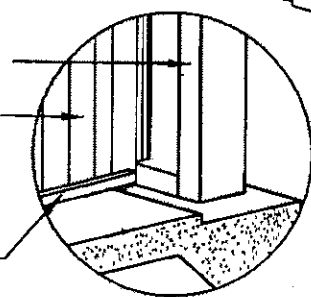
WALL COLUMN

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)

ENDWALL COLUMN

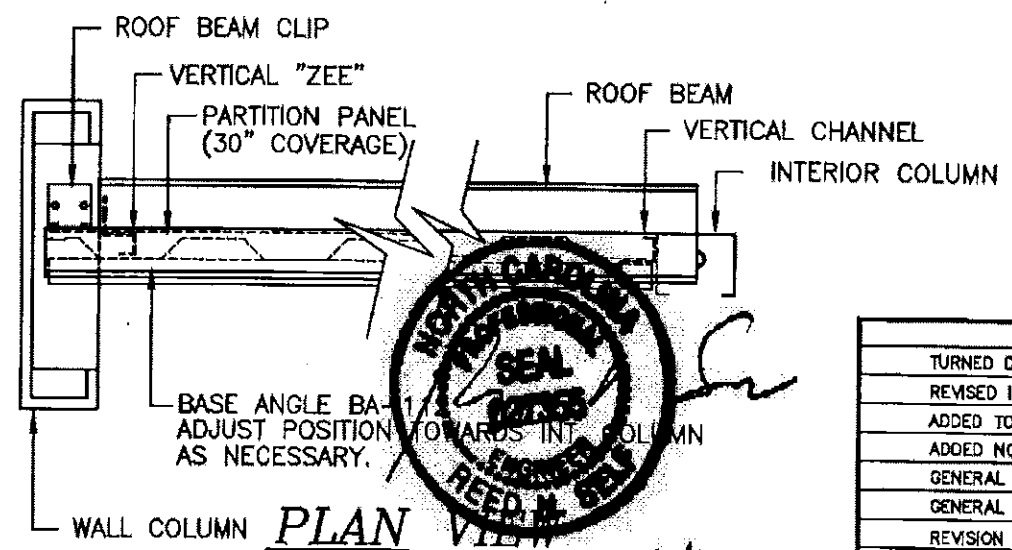
PARTITION PANEL

BASE ANGLE BA-112



**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.



PLAN VIEW

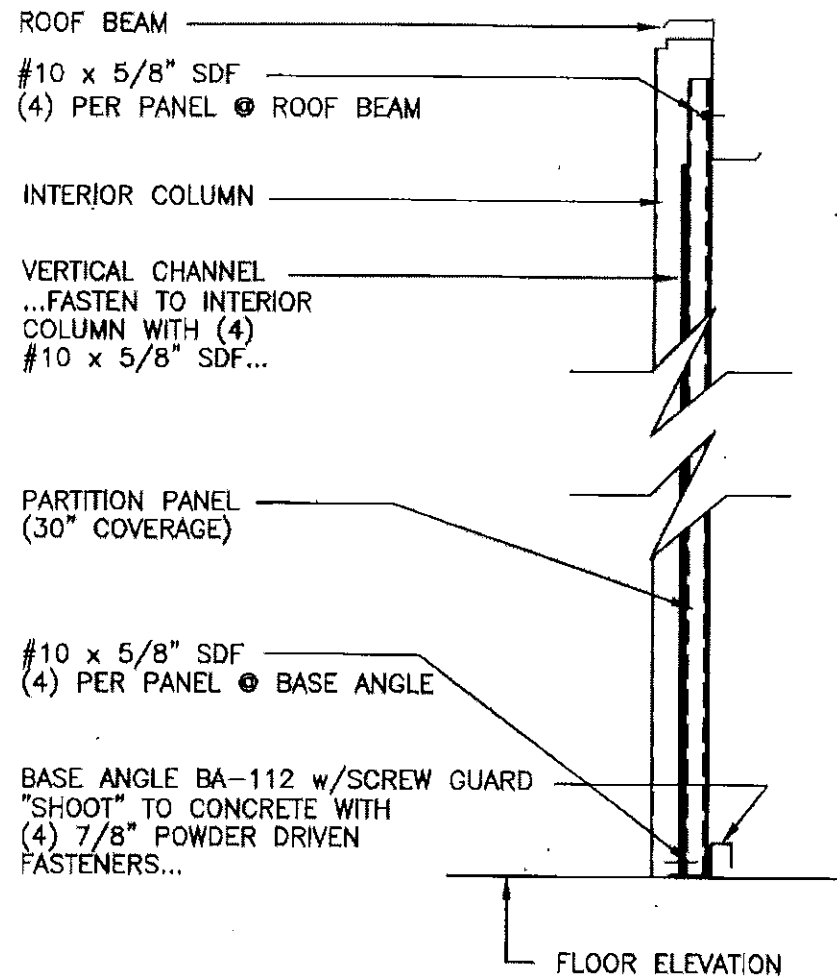


5-26-16

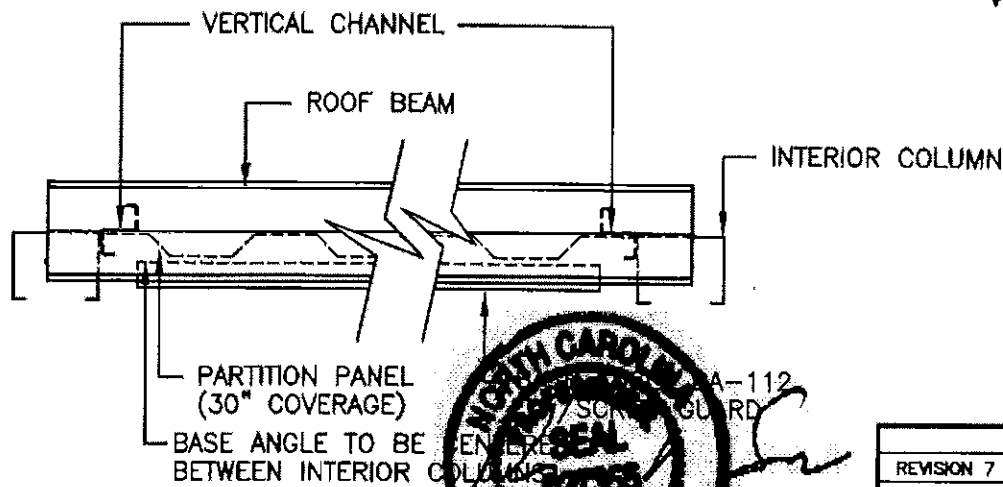
REVISIONS	DATE	BY
TURNED DIRECTION OF MID TOP CHANNELS	3/17/4	JCM
REVISED INTERIOR COLUMNS	8/29/02	BAM
ADDED TOP CHANNEL AT PANELS OVER 9'-0"	2/7/02	BDL
ADDED NOTE FOR INTERIOR COLUMNS	3/30/01	TLR
GENERAL REVISIONS	5/6/99	CWM
GENERAL REVISIONS	6/23/98	CJG
REVISION 1	6/4/98	KLH

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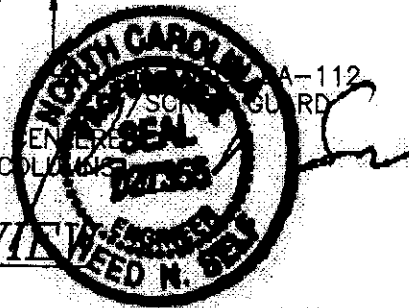
SHEET TITLE: Partition - Endwall Column to Interior Column		
DRAWN BY: J POPE	APPROVED BY:	DRAWING NUMBER: ERC200X
SCALE: NTS	DATE: 6/17/94	



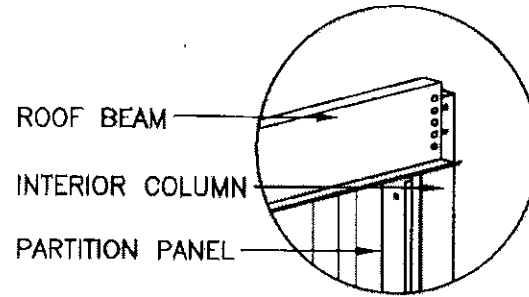
SECTION A-A



PLAN VIEW



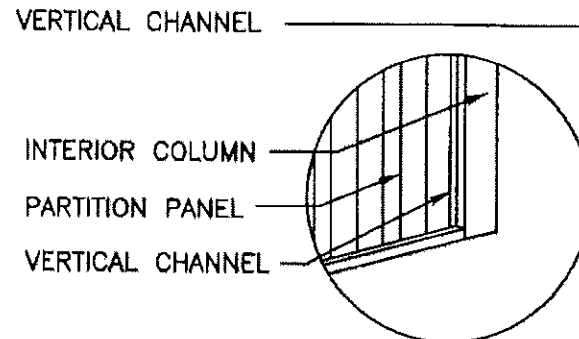
5-26-16



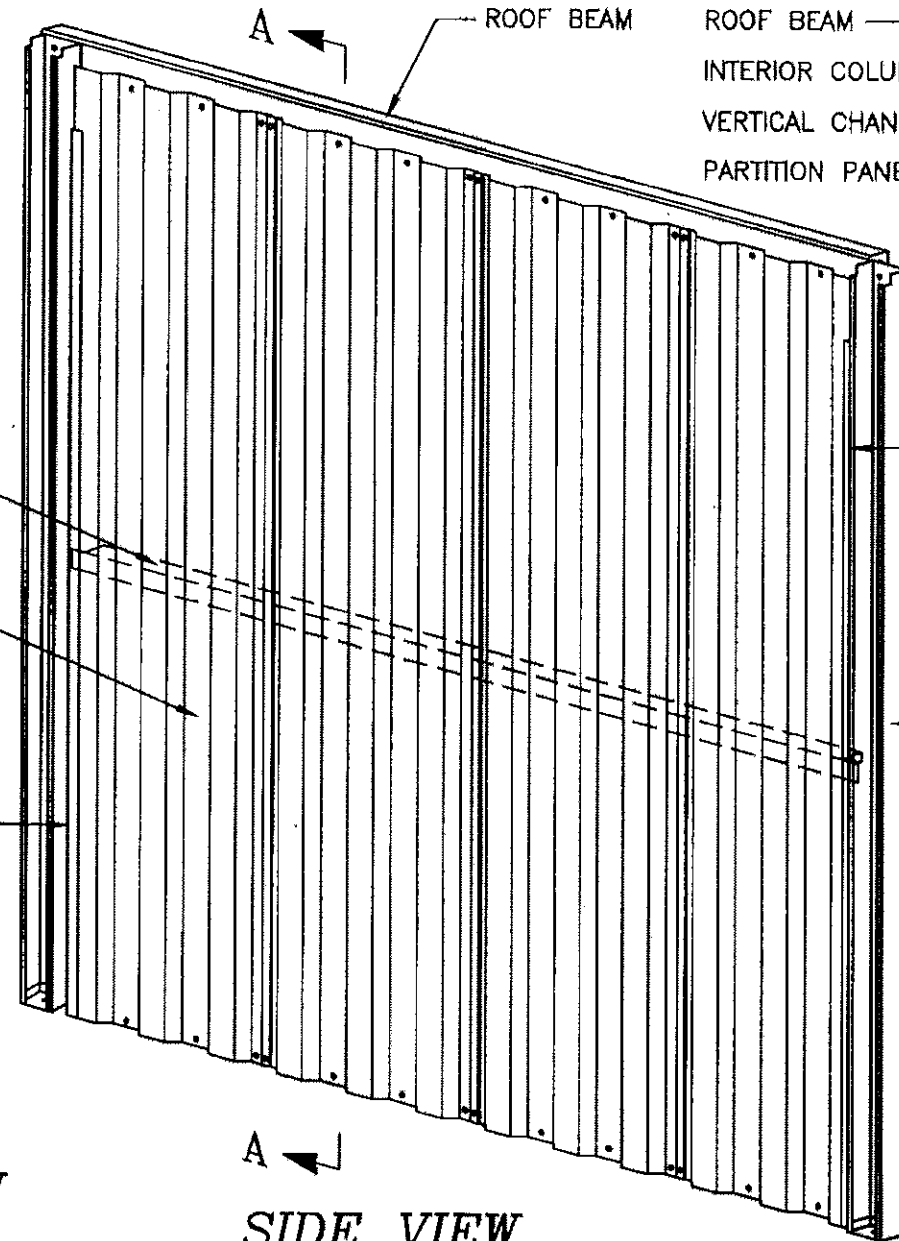
OPPOSITE VIEW THIS CORNER

(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)

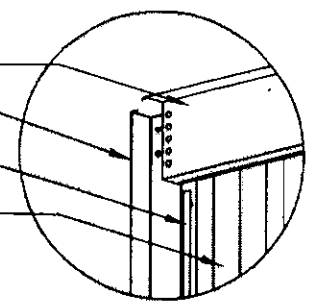


OPPOSITE VIEW THIS CORNER



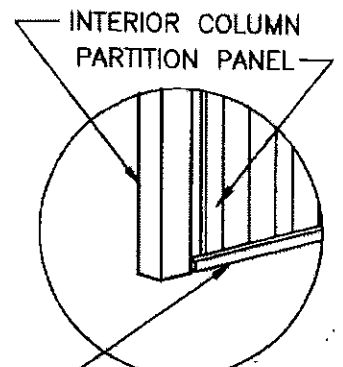
SIDE VIEW

BASE ANGLE BA-112 w/SCREW GUARD



OPPOSITE VIEW THIS CORNER

VERTICAL CHANNEL FASTEN TO INTERIOR COLUMN WITH (4) #10 x 5/8" SDF (SEE NOTE)



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	3/17/04	JCM
REVISION 6	8/29/02	BAM
REVISION 5	2/7/02	BDL
REVISION 4	3/30/01	TLR
REVISION 3	3-24-99	FOX
REVISION 2	6/23/98	CJG
REVISION 1	6/4/98	KLH

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SHEET TITLE: Partition - Interior Column to Interior Column		
DRAWN BY: J Pope	APPROVED BY:	DRAWING NUMBER: ERC201X
SCALE: NTS	DATE: 6/20/94	

BRACE "ZEE"
 ...FASTEN TO WALL COLUMN w/(1)
 3/8"φ 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"φ 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"φ x 3/4" BOLT, NUT, STAR
 WASHER & FLAT WASHER EACH END...

WALL COLUMN

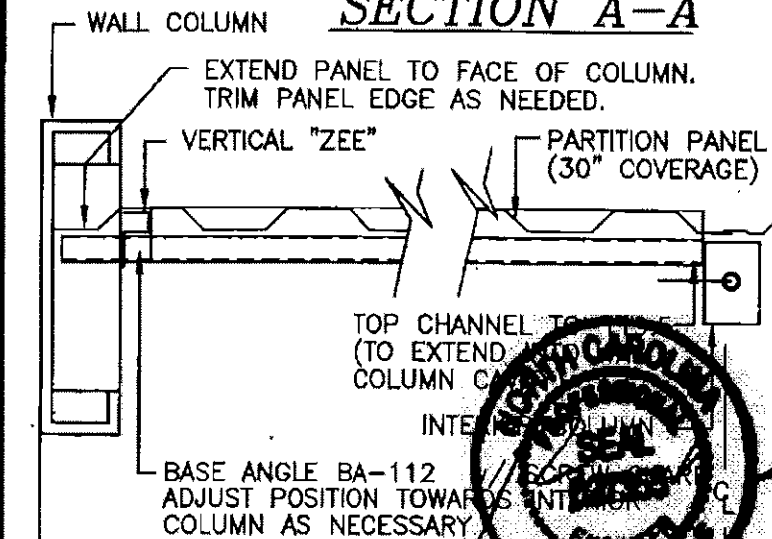
PARTITION PANEL
 (30" COVERAGE)

#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...

FLOOR ELEVATION
 THRESHOLD ELEVATION

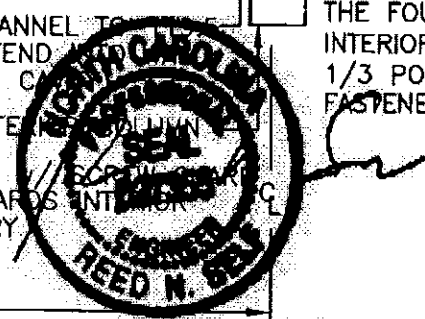
SECTION A-A



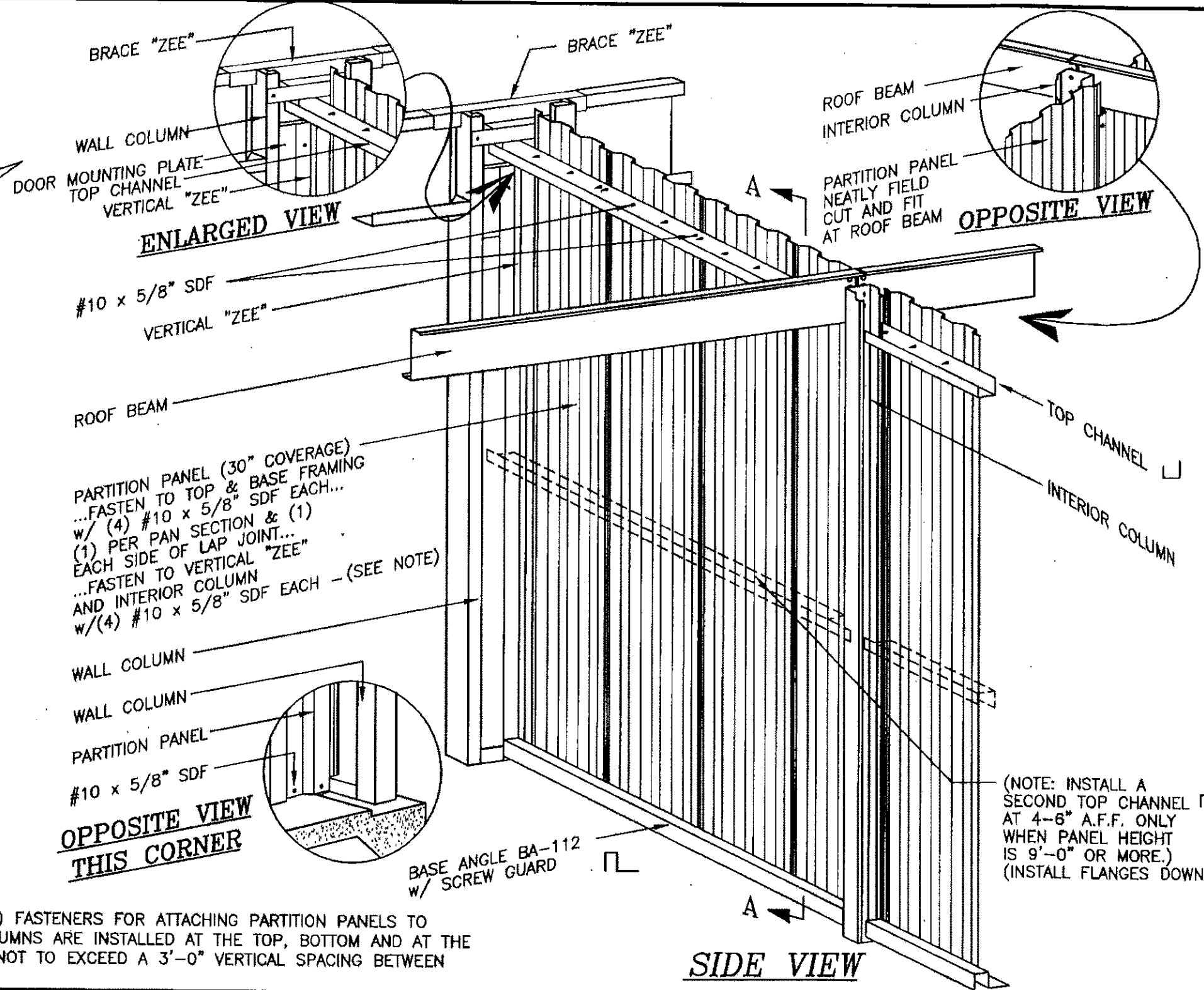
BASE ANGLE BA-112
 ADJUST POSITION TOWARDS INTERIOR
 COLUMN AS NECESSARY

10'-0"

PLAN VIEW - 26-16



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.



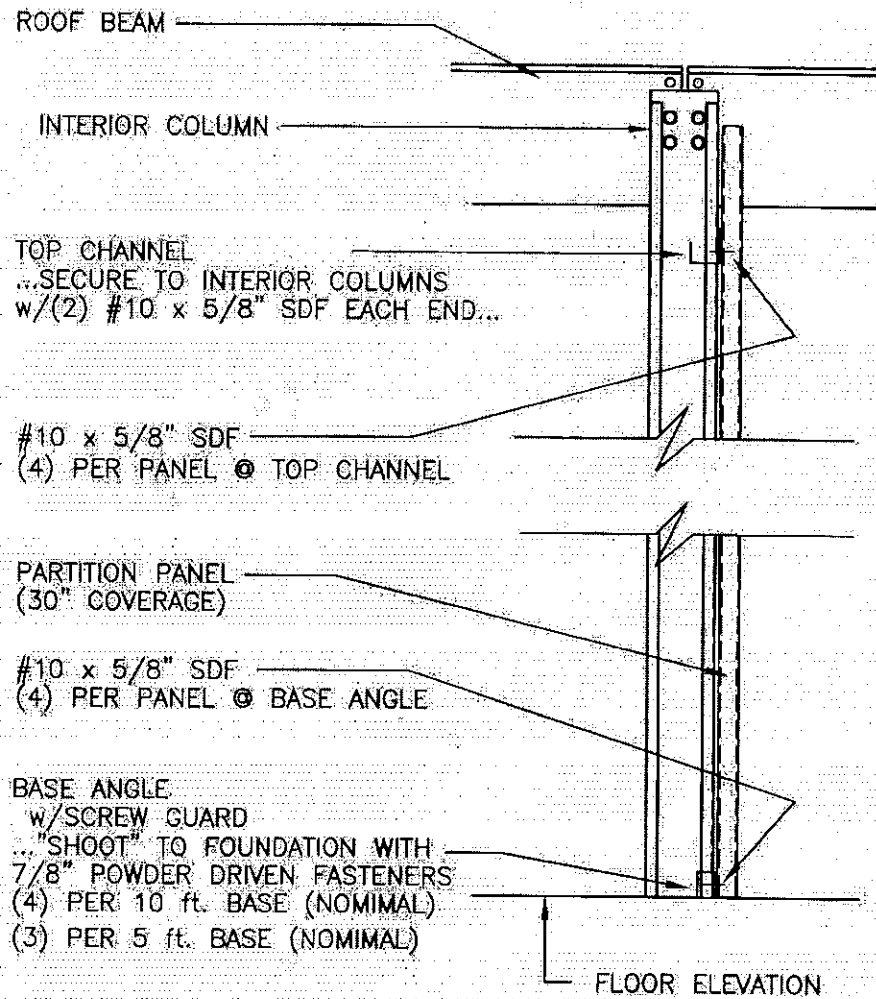
**OPPOSITE VIEW
 THIS CORNER**

SIDE VIEW

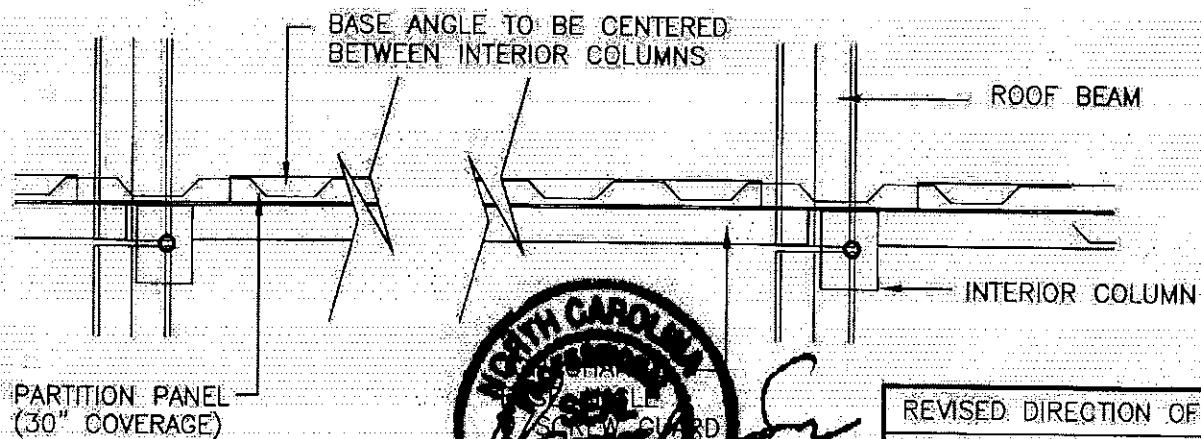
REVISIONS	DATE	BY
REVISED DIRECTION OF MID TOP CHANNEL	3/17/04	JCM
REVISED INTERIOR COLUMNS	8/29/02	BAM
ADDED TOP CHANNEL AT PANELS OVER 9'-0"	2/7/02	BOL
ADDED NOTE FOR INTERIOR COLUMNS	4/2/01	TLR
GENERAL REVISIONS	4/12/99	CWM

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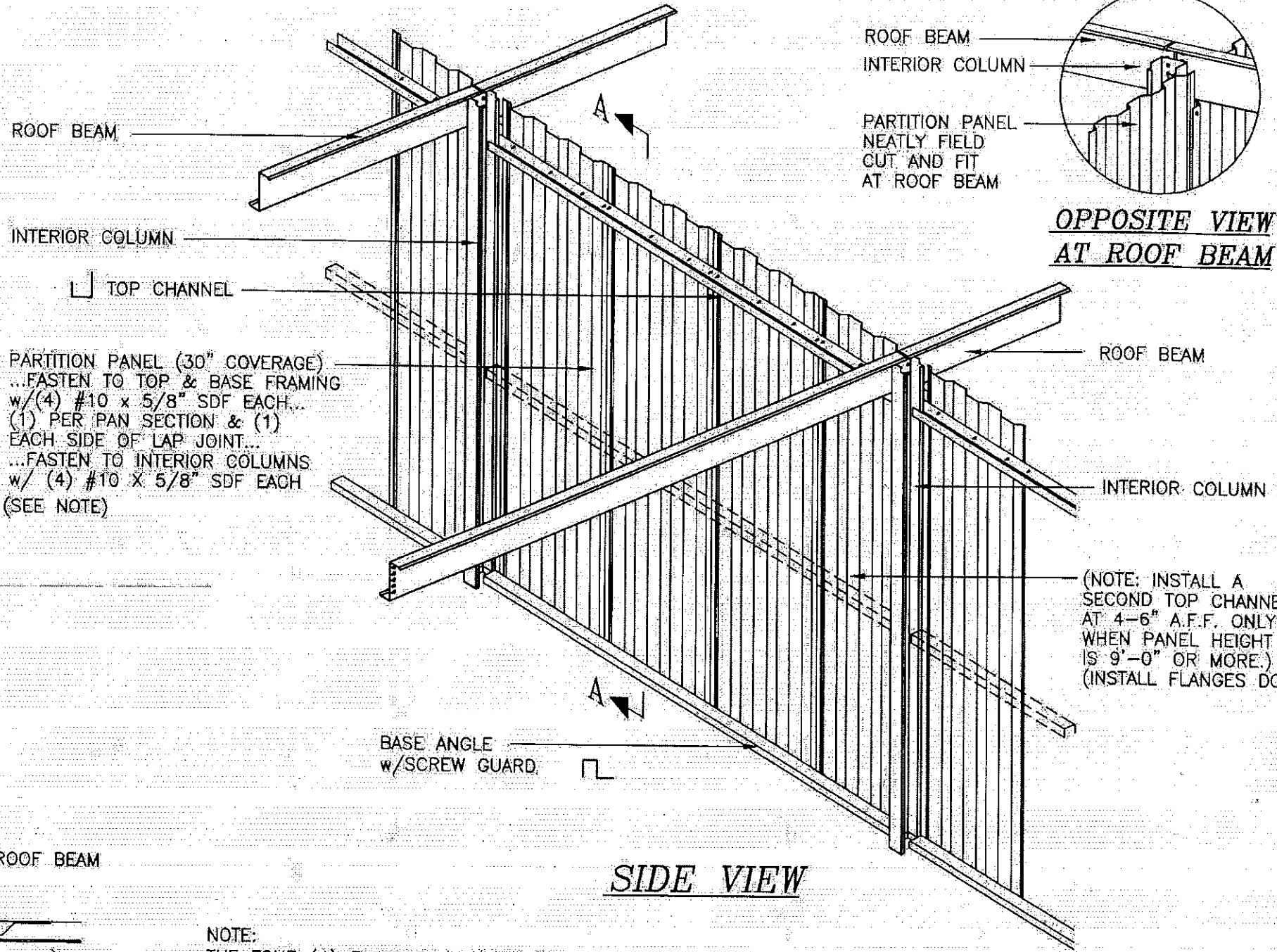
SHEET TITLE: Partition - Sidewall Column to Interior Column - 10' span		
DRAWN BY: J Pope	APPROVED BY:	DRAWING NUMBER: ERC202X
SCALE: NTS	DATE: 6/20/94	



SECTION A-A



PLAN



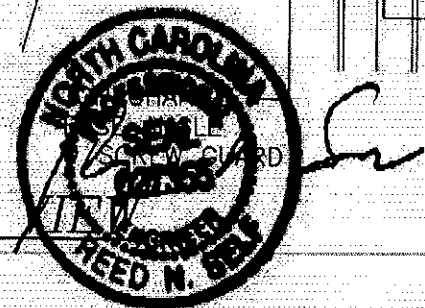
SIDE VIEW

OPPOSITE VIEW AT ROOF BEAM

PARTITION PANEL (30" COVERAGE)
 ...FASTEN TO TOP & BASE FRAMING
 w/(4) #10 x 5/8" SDF EACH...
 (1) PER PAN SECTION & (1)
 EACH SIDE OF LAP JOINT...
 ...FASTEN TO INTERIOR COLUMNS
 w/ (4) #10 X 5/8" SDF EACH
 (SEE NOTE)

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

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.



5-26-16

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
REVISIONS	DATE	BY



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SHEET TITLE: <i>Partition - Interior Column to Interior Column (all eave heights)</i>		
DRAWN BY: J POPE	APPROVED BY:	DRAWING NUMBER: ERC203X
SCALE: NTS	DATE: 6/22/98	

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

TOP CHANNEL TC-120
 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"φ 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"φ x 3/4" BOLT, NUT, STAR
 WASHER & FLAT WASHER EACH END...

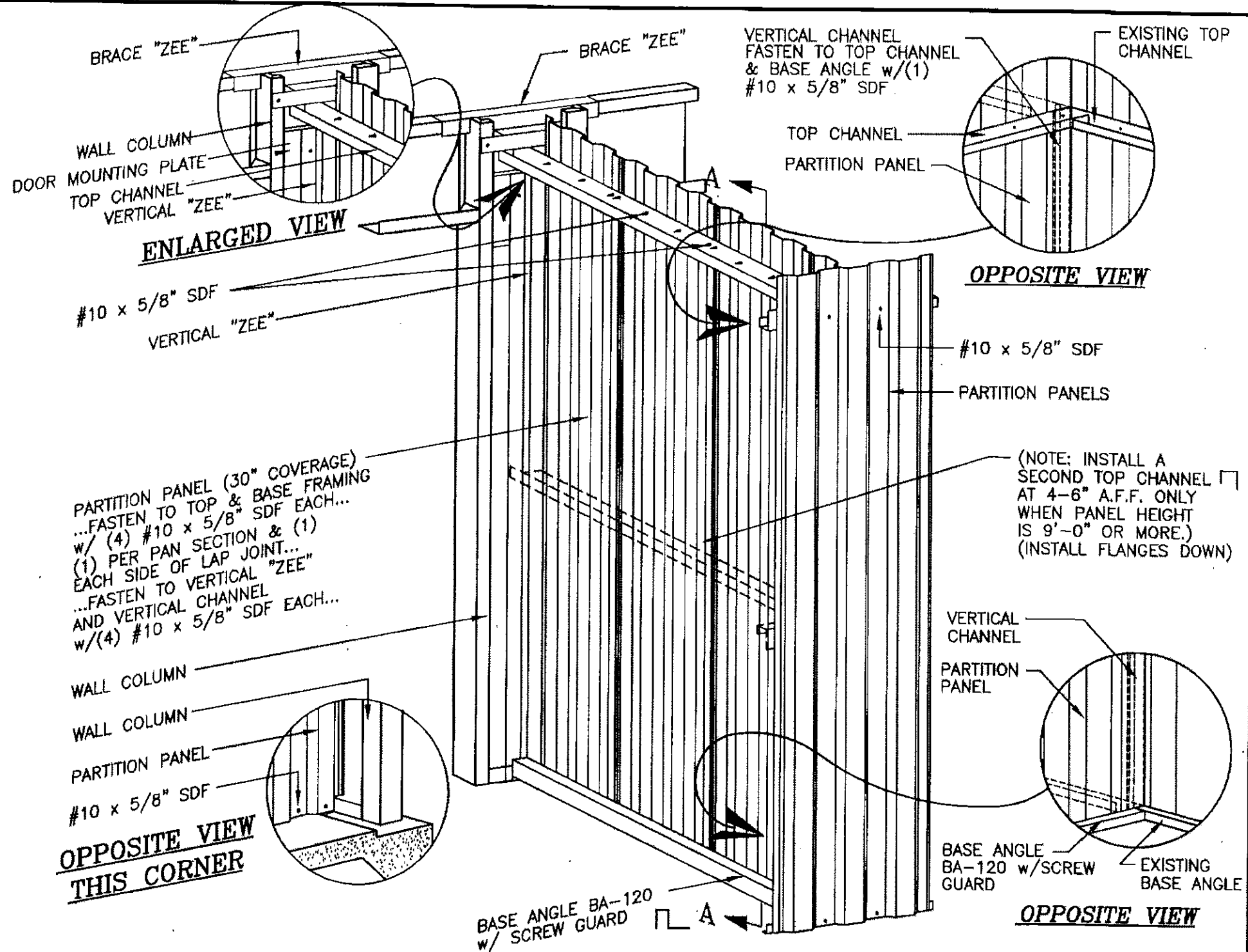
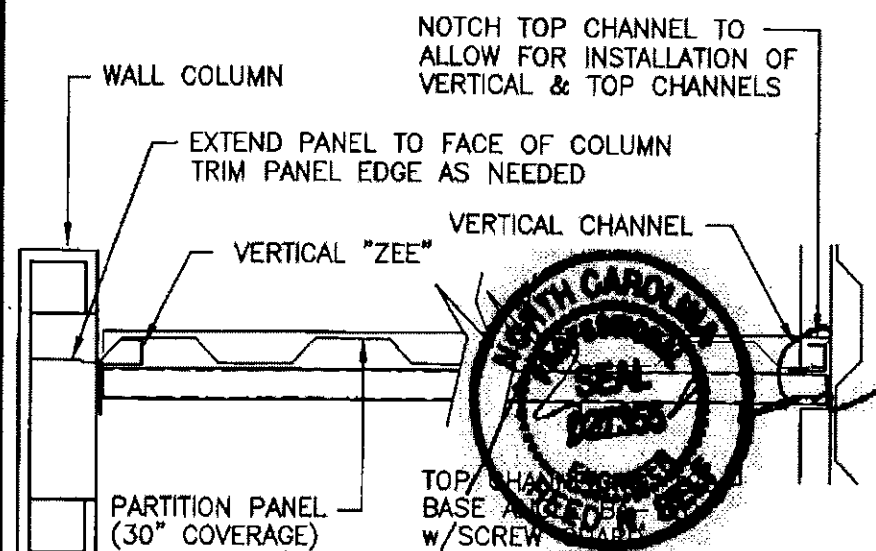
WALL COLUMN

PARTITION PANEL
 (30" COVERAGE)

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

BASE ANGLE BA-120 w/SCREW GUARD
 "SHOOT" TO FOUNDATION
 w/(4) 7/8" POWDER
 DRIVEN FASTENERS...
 SECURE TO VERTICAL "CEE"
 w/ (1) #10 x 5/8" SDF

SECTION A-A



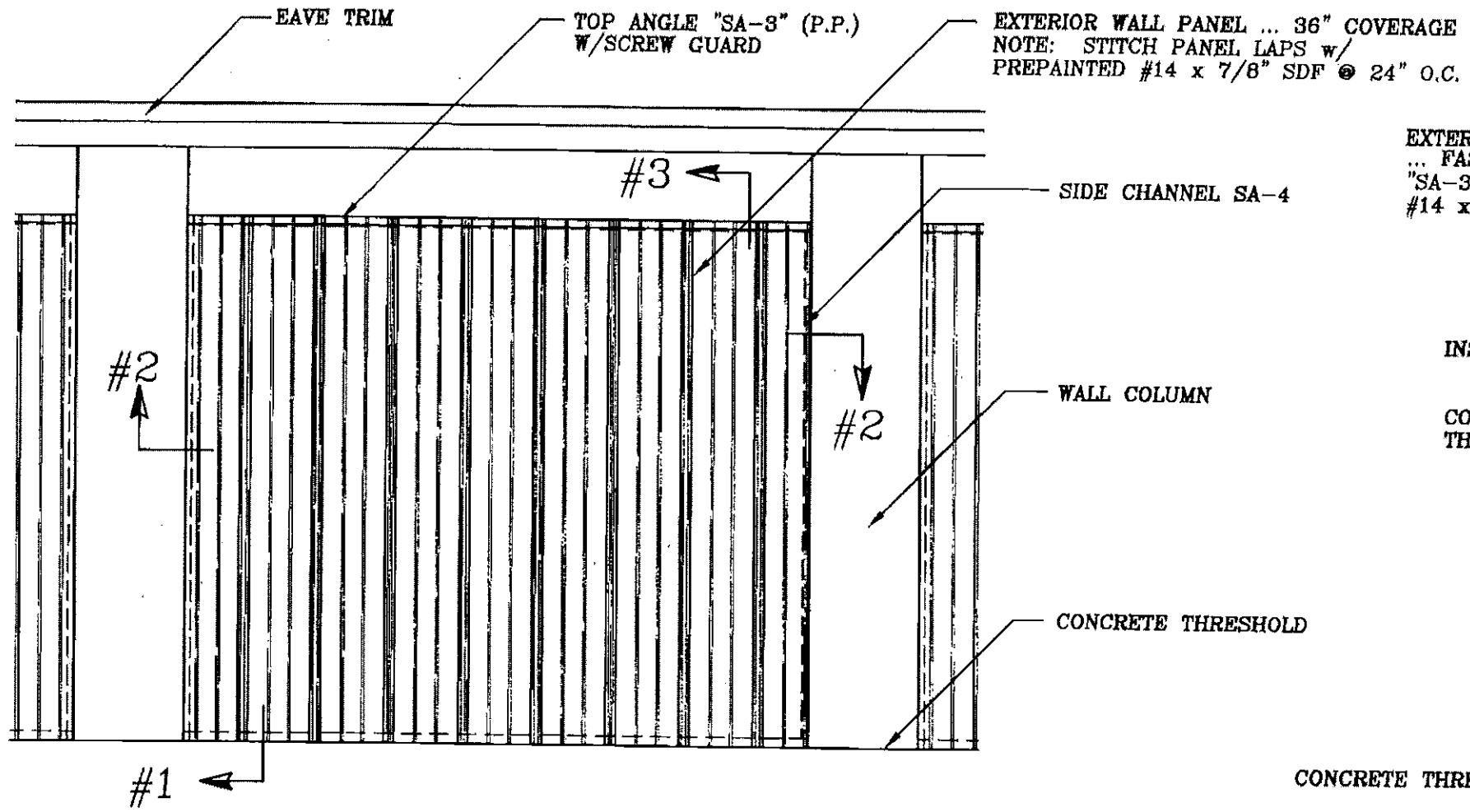
PARTITION PANEL (30" COVERAGE)
 ...FASTEN TO TOP & BASE FRAMING
 w/ (4) #10 x 5/8" SDF EACH...
 (1) PER PAN SECTION & (1)
 EACH SIDE OF LAP JOINT...
 ...FASTEN TO VERTICAL "ZEE"
 AND VERTICAL CHANNEL
 w/(4) #10 x 5/8" SDF EACH...

**OPPOSITE VIEW
 THIS CORNER**

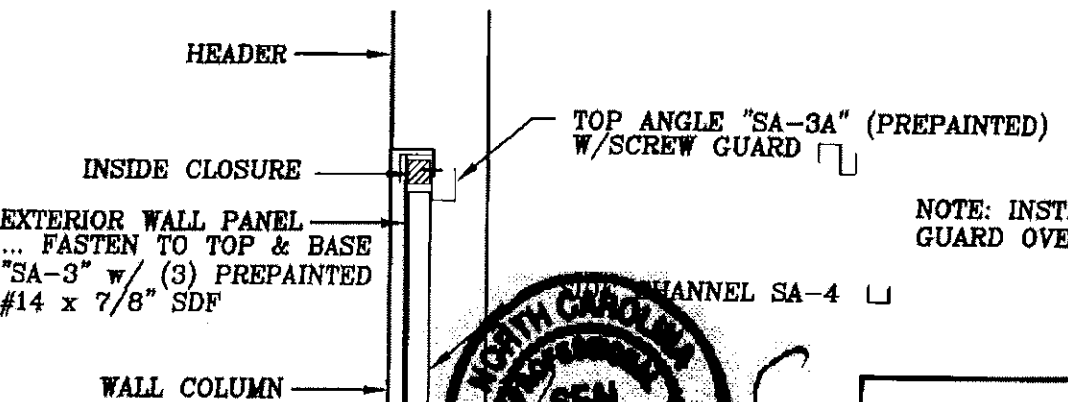
REVISIONS	DATE	BY
REVISED DIRECTION OF MID HAT CHANNEL	3/17/04	JCM
REVISED FASTENER NOTE	8/30/02	JCM
ADDED TOP CHANNEL AT PANELS OVER 9'-0"	2/7/02	BDL
GENERAL REVISIONS	4/2/01	TLR
GENERAL REVISIONS	5/6/99	CWM
GENERAL REVISIONS	6/23/98	CJG

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 STATESVILLE, NC 28625
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SHEET TITLE: Partition - Endwall Column to Interior Partition		
DRAWN BY: J Pope	APPROVED BY:	DRAWING NUMBER: ERC207X
SCALE: NTS	DATE: 6/24/94	



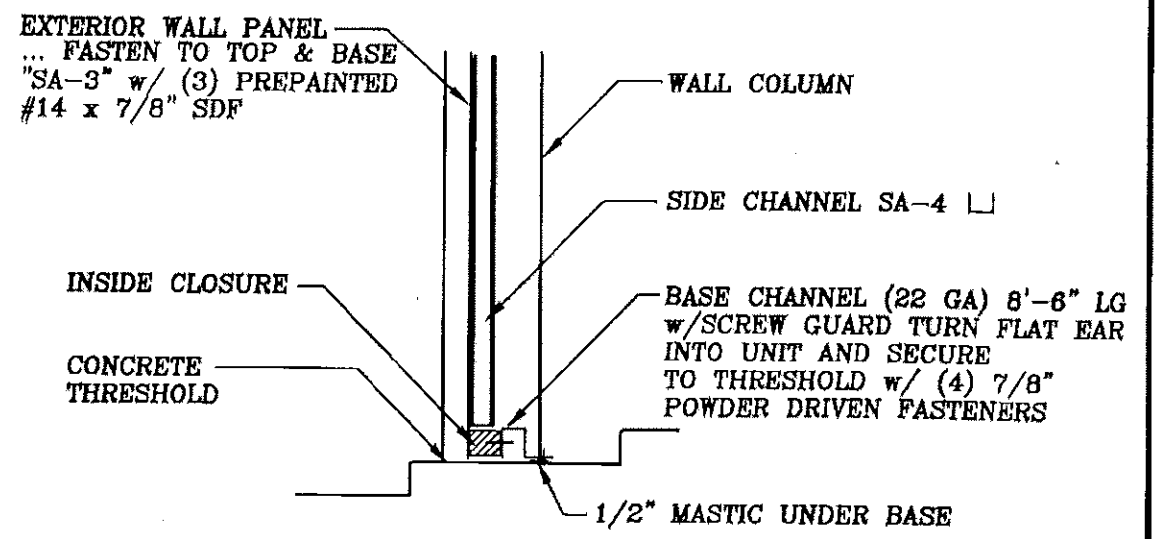
EXTERIOR WALL PANEL INSTALLATION DETAILS



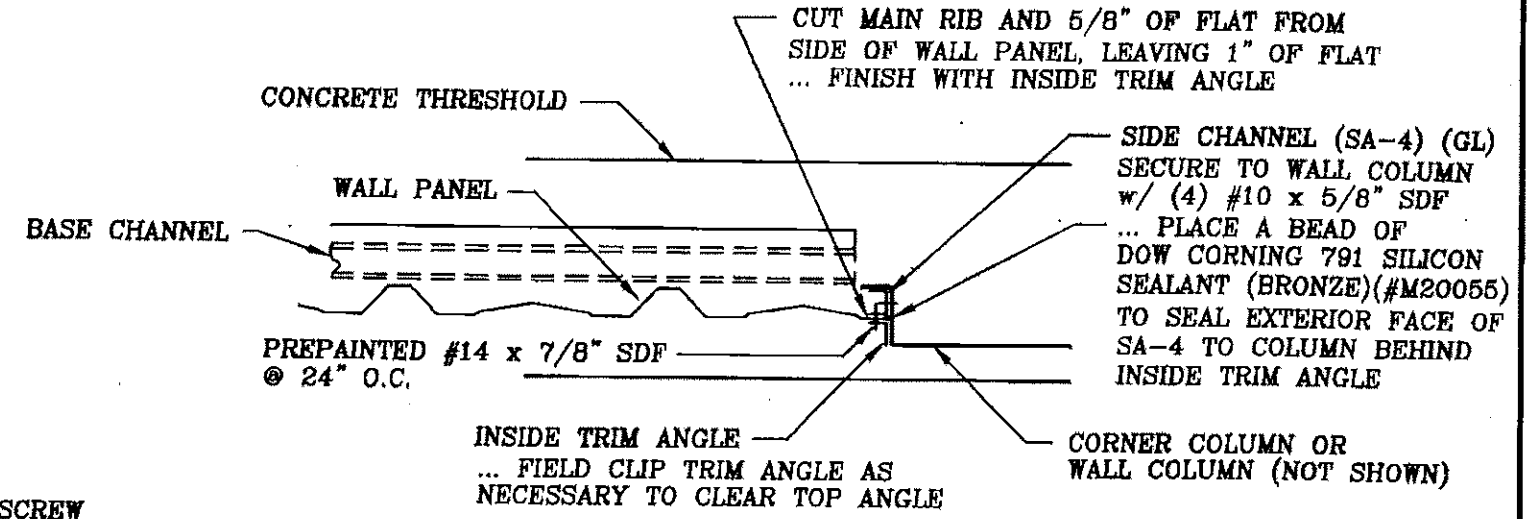
SECTION #3
5-26-16



NOTE: INSTALL WALL PANEL SCREW GUARD OVER EXPOSED STITCH SCREWS



SECTION #1

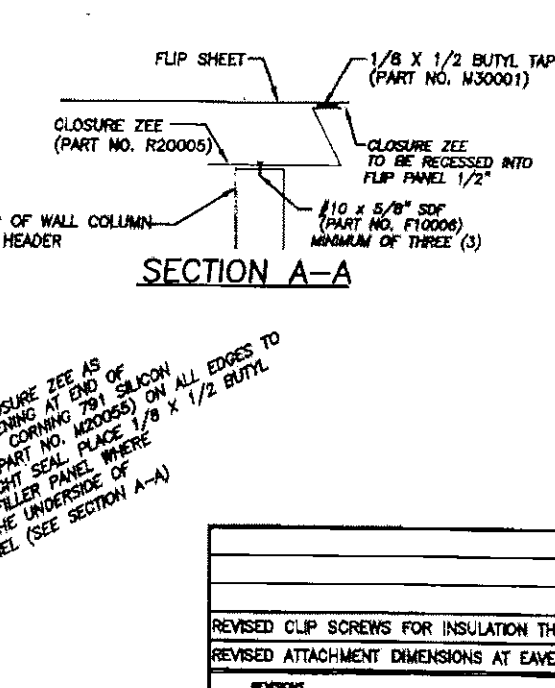
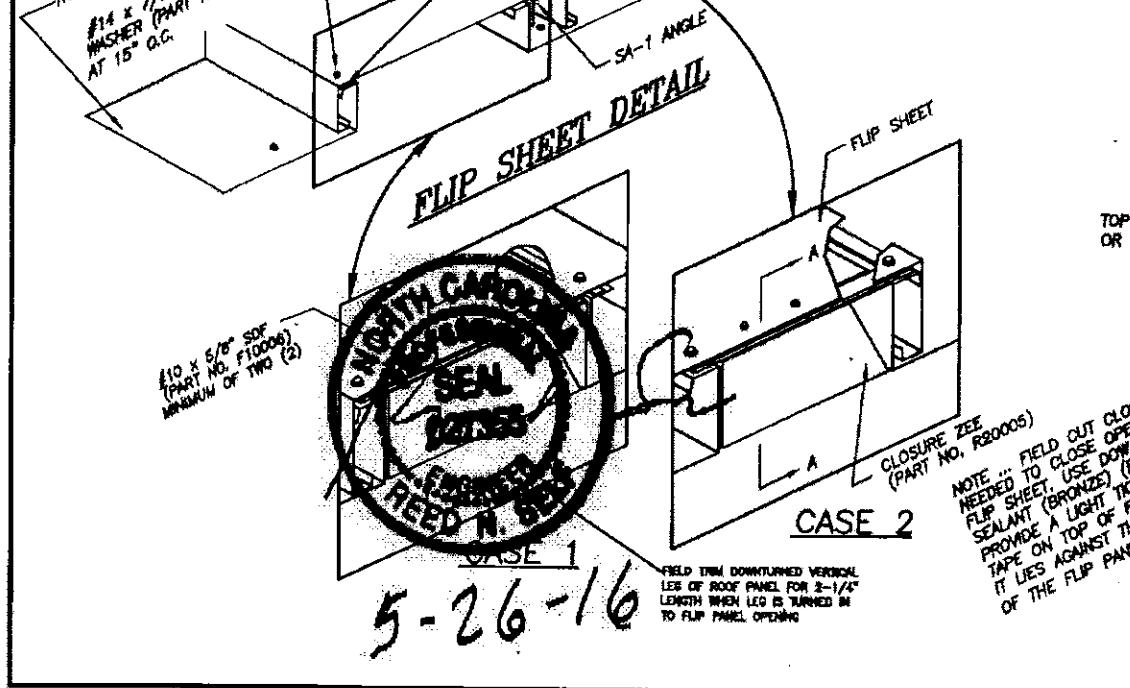
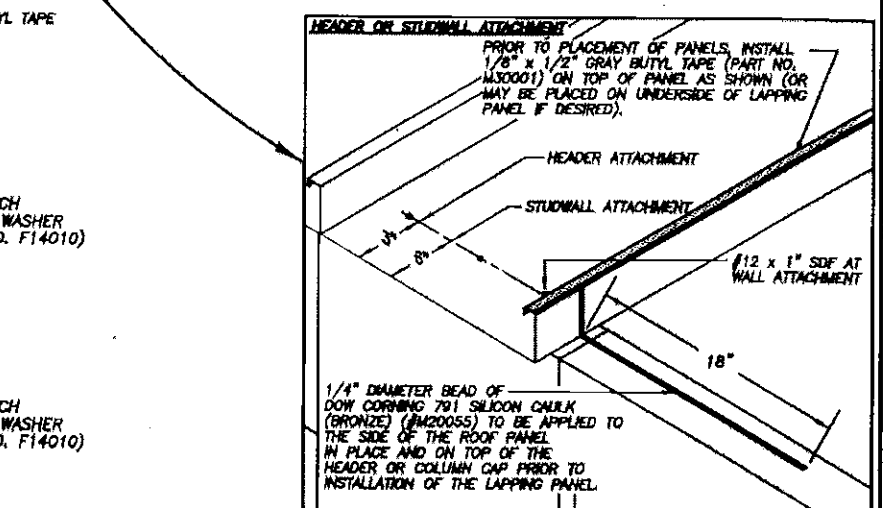
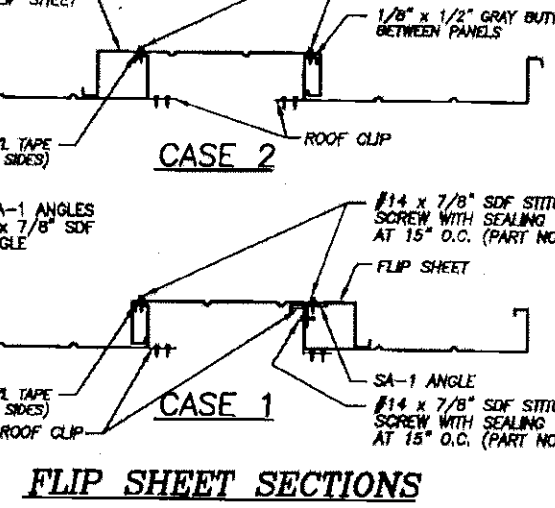
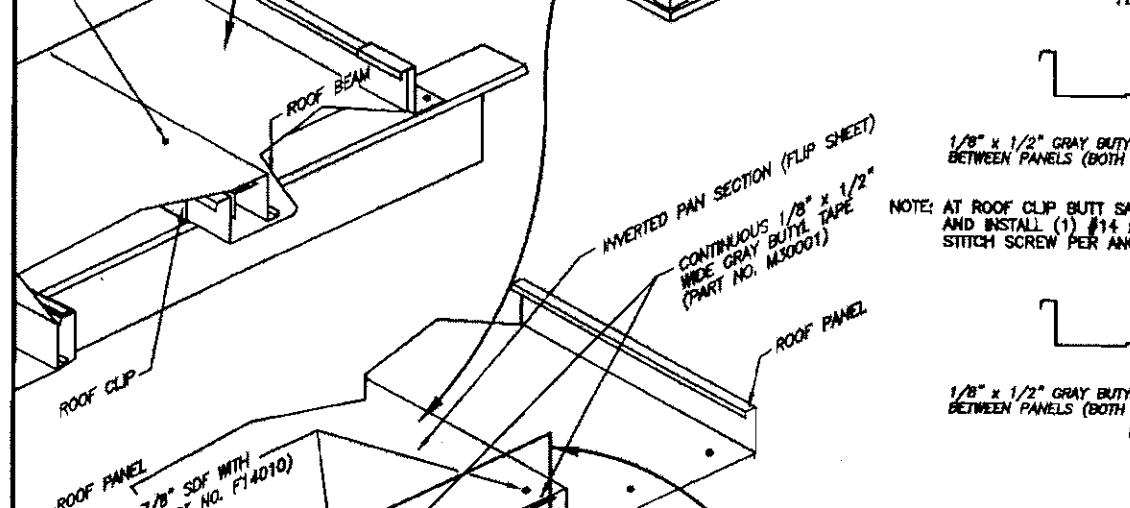
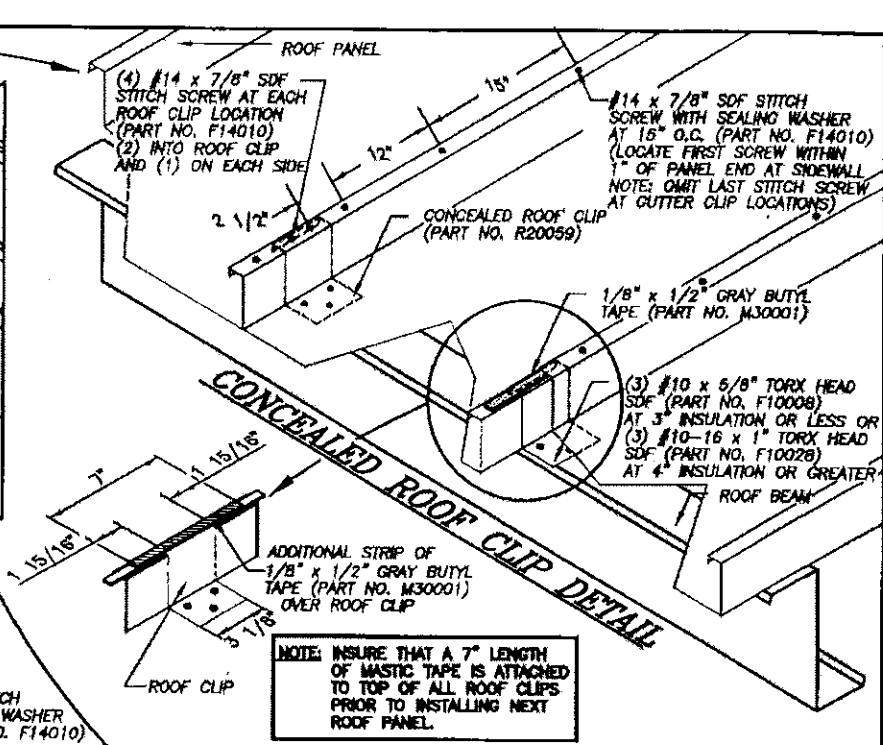
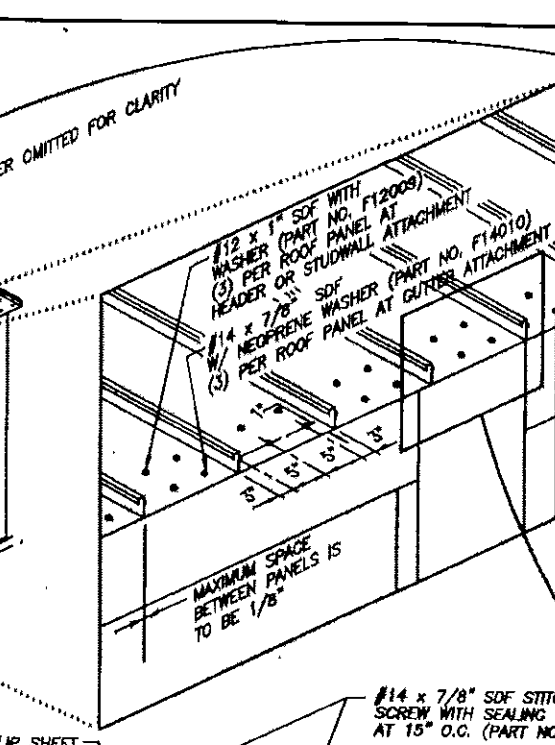
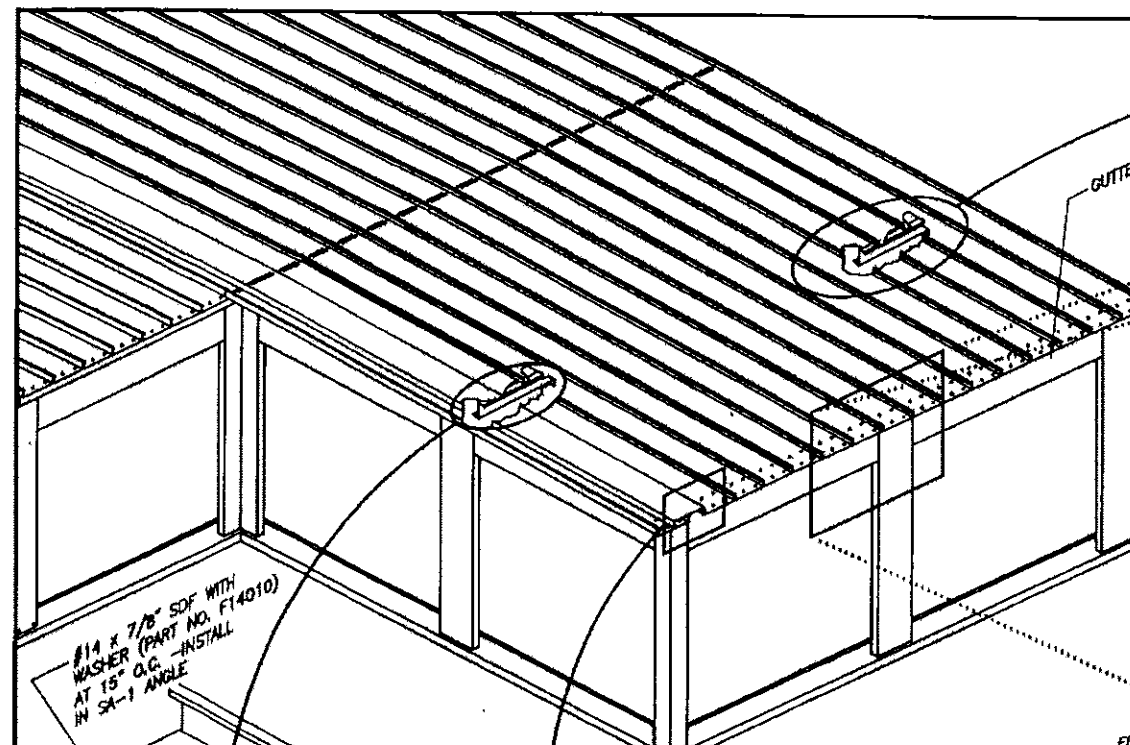
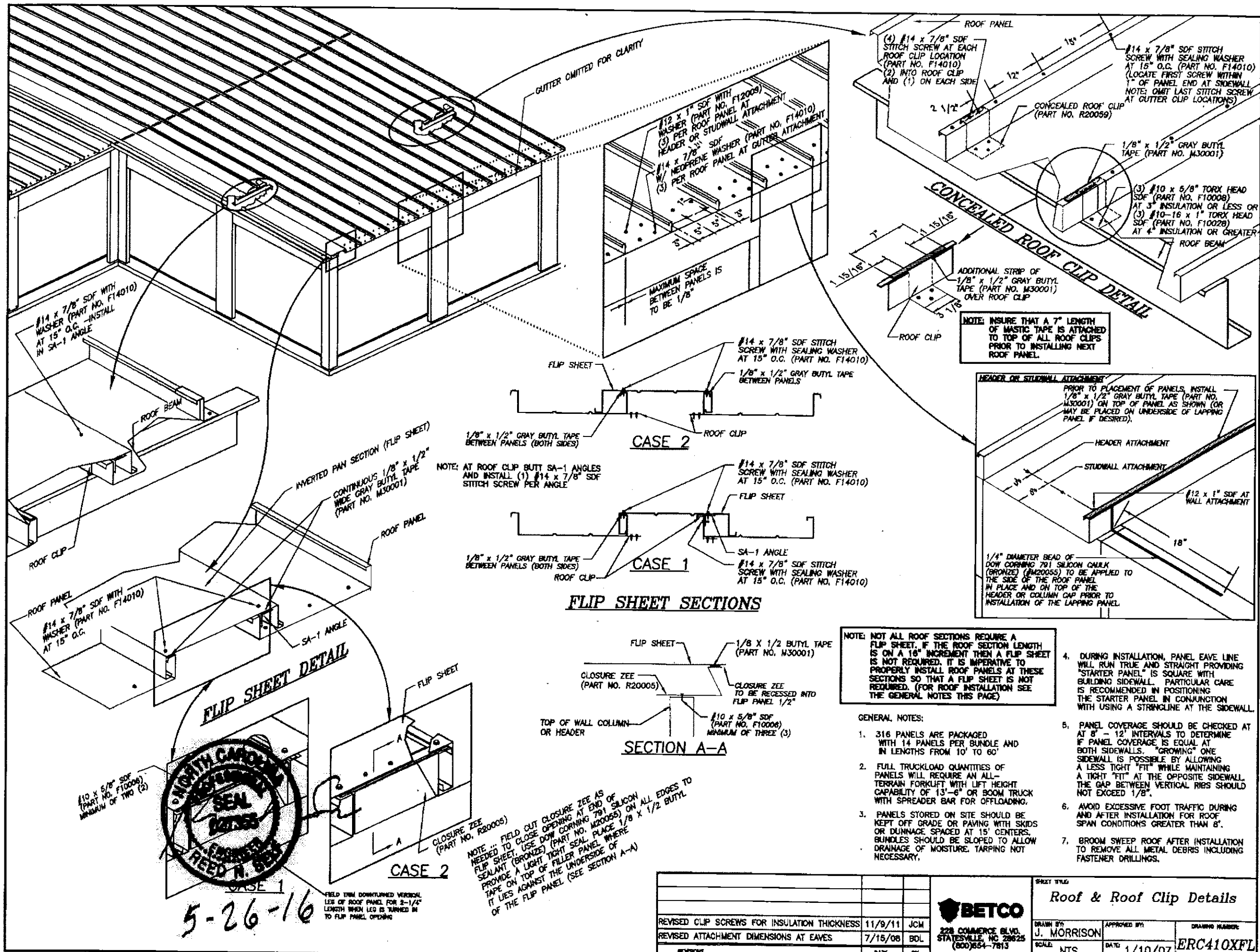


SECTION #2

REVISIONS	DATE	BY
△ REVISED BASE CHANNEL GAGE	2-26-13	DPP
△ REVISED SECTION #2	10-18-04	BDL
△ GENERAL REVISIONS	3-24-99	FOX
△ GENERAL REVISIONS	3-9-99	FOX

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SHEET TITLE: EXTERIOR WALL PANEL INSTALLATION @ 8'-3" WALL COLUMN w/ 8'-8 LG. HEADER		
DRAWN BY: J Pope	APPROVED BY:	DRAWING NUMBER: ERC302X
SCALE: 1/2" = 1'-0"	DATE: 6/27/94	



NOTE: NOT ALL ROOF SECTIONS REQUIRE A FLIP SHEET. IF THE ROOF SECTION LENGTH IS ON A 16\"/>

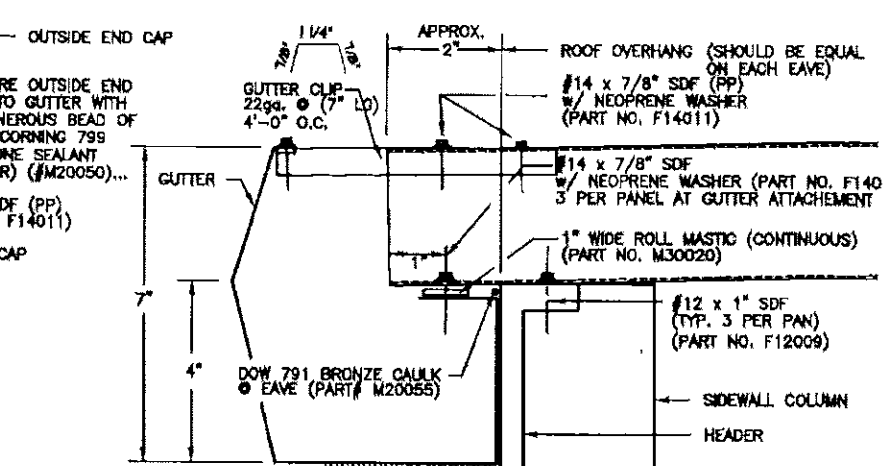
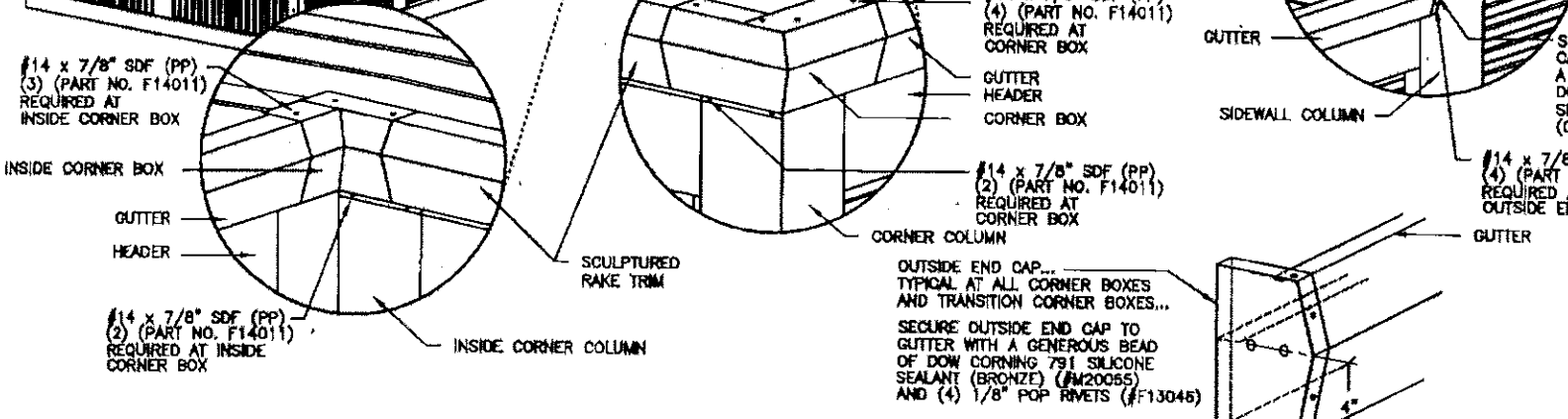
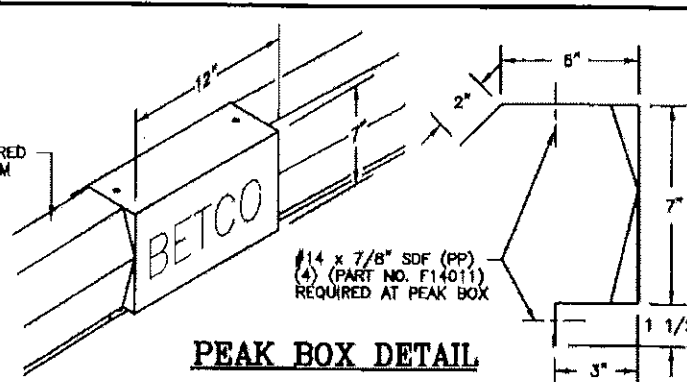
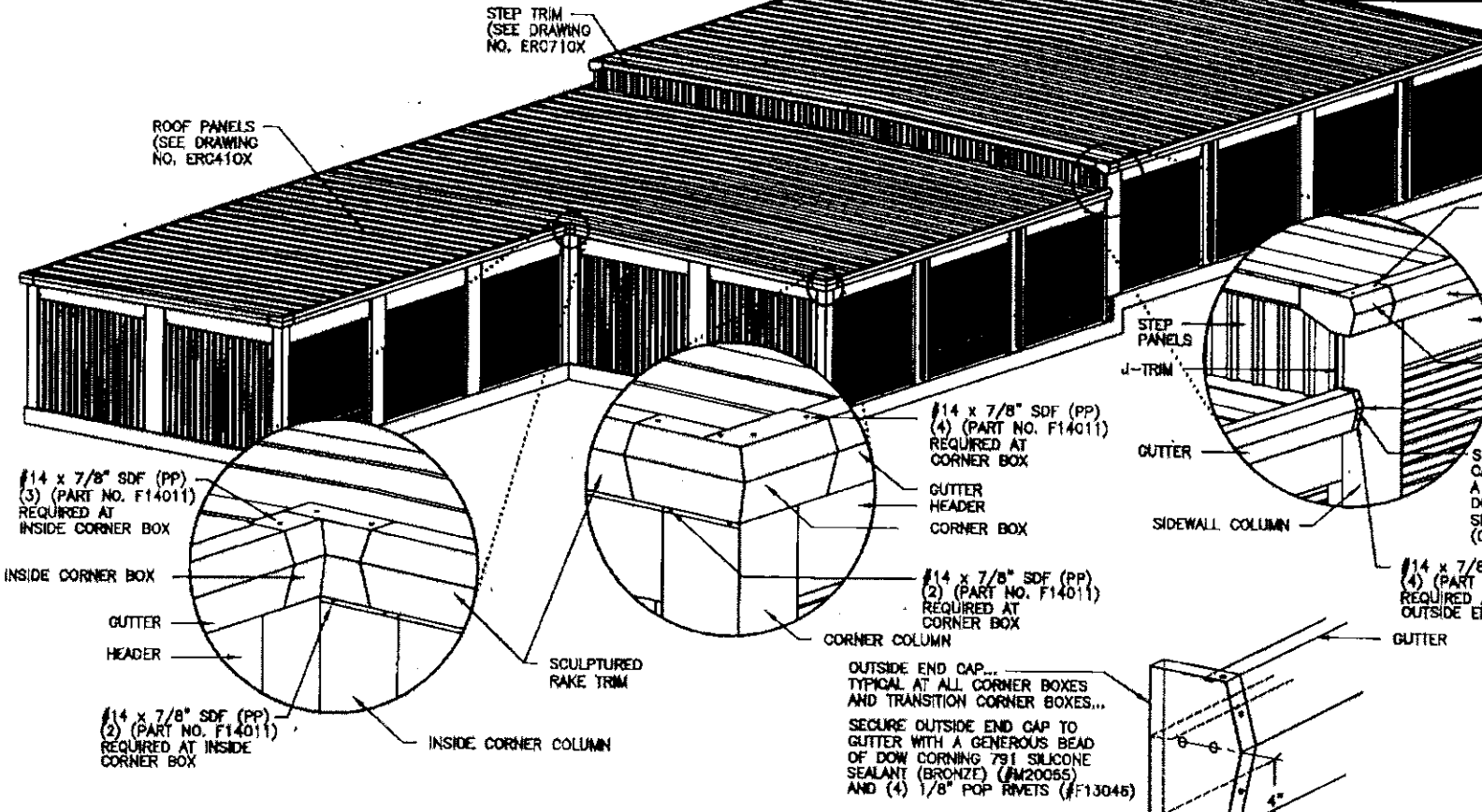
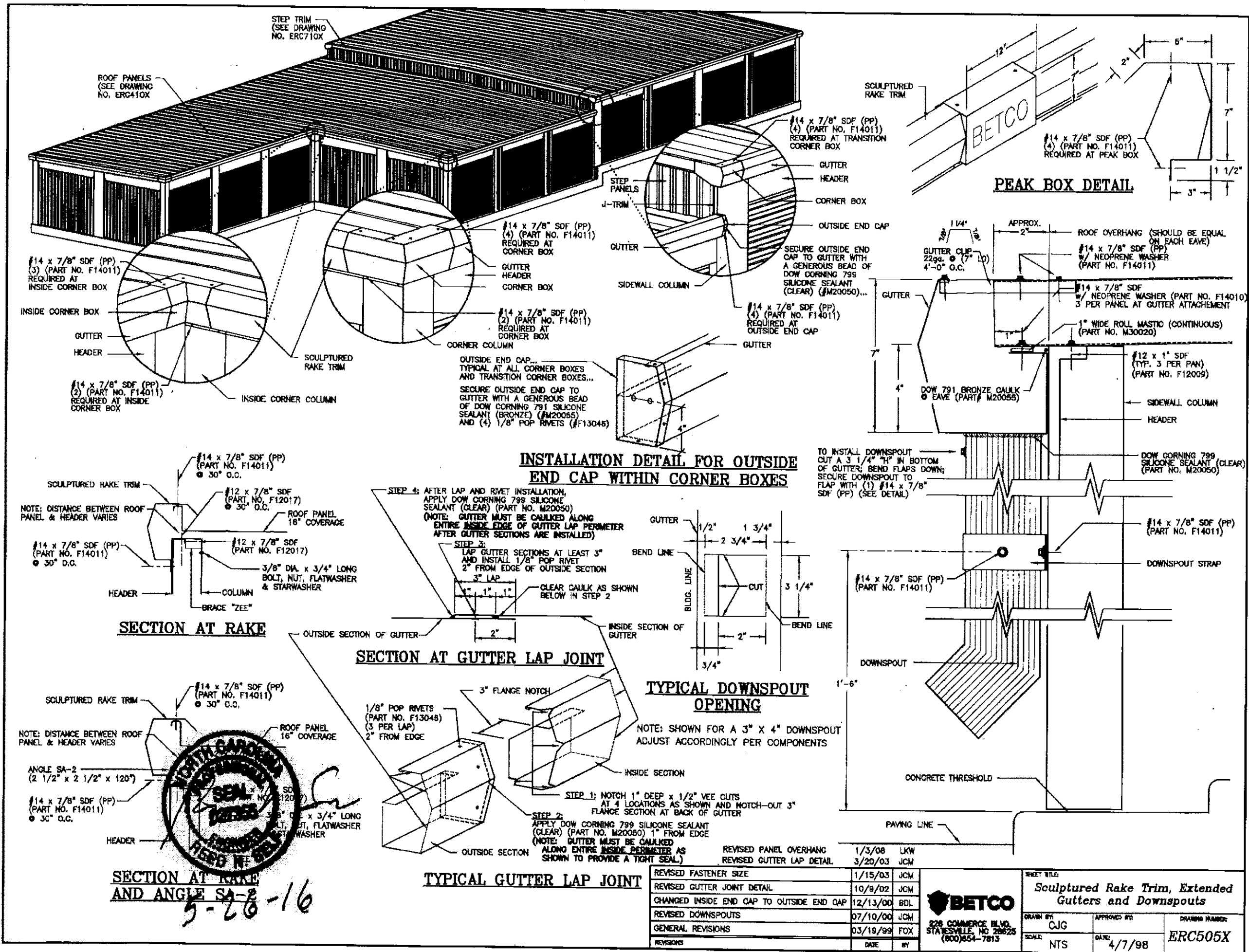
GENERAL NOTES:

- 316 PANELS ARE PACKAGED WITH 14 PANELS PER BUNDLE AND IN LENGTHS FROM 10' TO 60'
- FULL TRUCKLOAD QUANTITIES OF PANELS WILL REQUIRE AN ALL-TERRAIN FORKLIFT WITH LIFT HEIGHT CAPABILITY OF 13'-6\"/>
- PANELS STORED ON SITE SHOULD BE KEPT OFF GRADE OR PAVING WITH SKIDS OR DUNNAGE SPACED AT 15' CENTERS. BUNDLES SHOULD BE SLOPED TO ALLOW DRAINAGE OF MOISTURE. TARPING NOT NECESSARY.
- DURING INSTALLATION, PANEL EAVE LINE WILL RUN TRUE AND STRAIGHT PROVIDING "STARTER PANEL" IS SQUARE WITH BUILDING SIDEWALL. PARTICULAR CARE IS RECOMMENDED IN POSITIONING THE STARTER PANEL IN CONJUNCTION WITH USING A STRINGLINE AT THE SIDEWALL.
- PANEL COVERAGE SHOULD BE CHECKED AT 8' - 12' INTERVALS TO DETERMINE IF PANEL COVERAGE IS EQUAL AT BOTH SIDEWALLS. "GROWING" ONE SIDEWALL IS POSSIBLE BY ALLOWING A LESS TIGHT "FIT" WHILE MAINTAINING A TIGHT "FIT" AT THE OPPOSITE SIDEWALL. THE GAP BETWEEN VERTICAL RIBS SHOULD NOT EXCEED 1/8\"/>
- AVOID EXCESSIVE FOOT TRAFFIC DURING AND AFTER INSTALLATION FOR ROOF SPAN CONDITIONS GREATER THAN 8'.
- BROOM SWEEP ROOF AFTER INSTALLATION TO REMOVE ALL METAL DEBRIS INCLUDING FASTENER DRILLINGS.

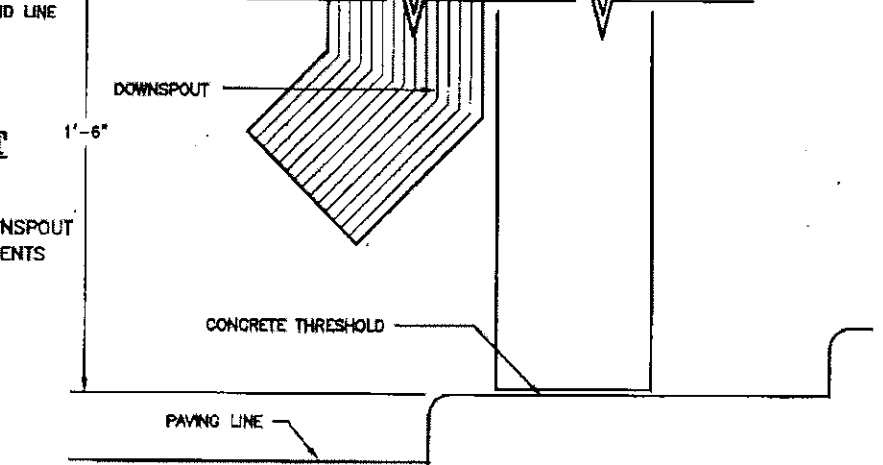
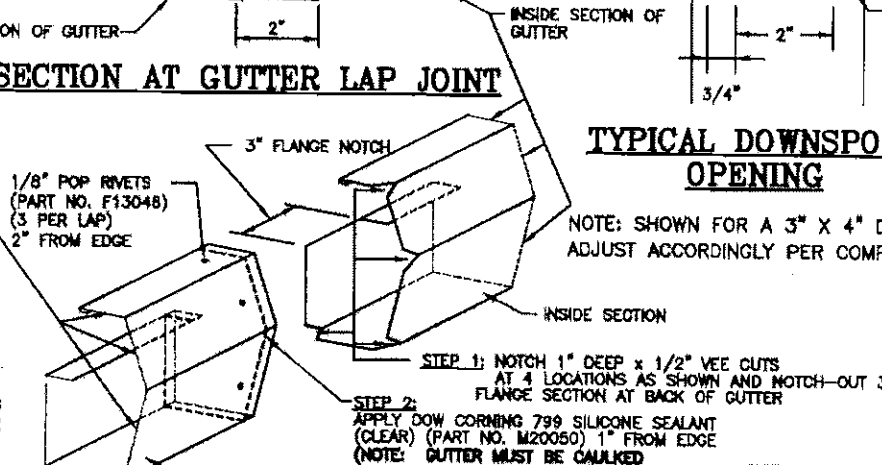
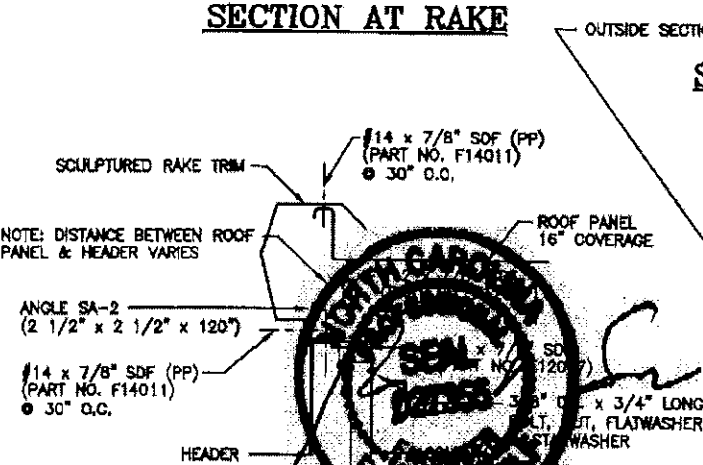
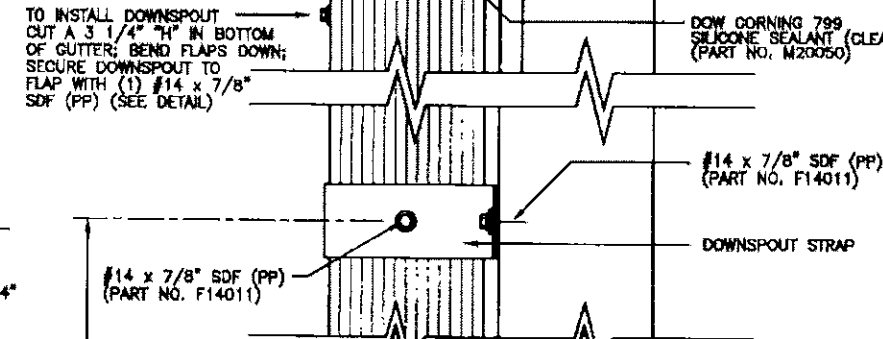
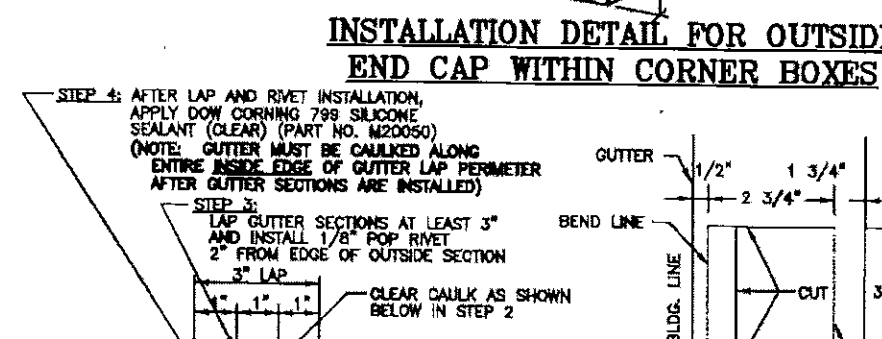
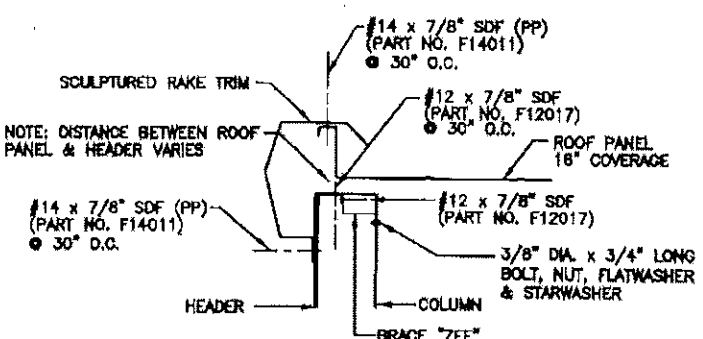


5-26-16

REVISIONS		DATE		BY		 228 COMMERCE BLVD. STATESVILLE, NC 28625 (800)854-7813	SHEET TITLE Roof & Roof Clip Details	
REVISED CLIP SCREWS FOR INSULATION THICKNESS	11/9/11	JCM					DRAWN BY: J. MORRISON	APPROVED BY:
REVISED ATTACHMENT DIMENSIONS AT EAVES	7/15/08	BOL				SCALE: NTS	DATE: 1/10/07	



INSTALLATION DETAIL FOR OUTSIDE END CAP WITHIN CORNER BOXES



SECTION AT RAKE AND ANGLE SA-2
5-26-16

TYPICAL GUTTER LAP JOINT

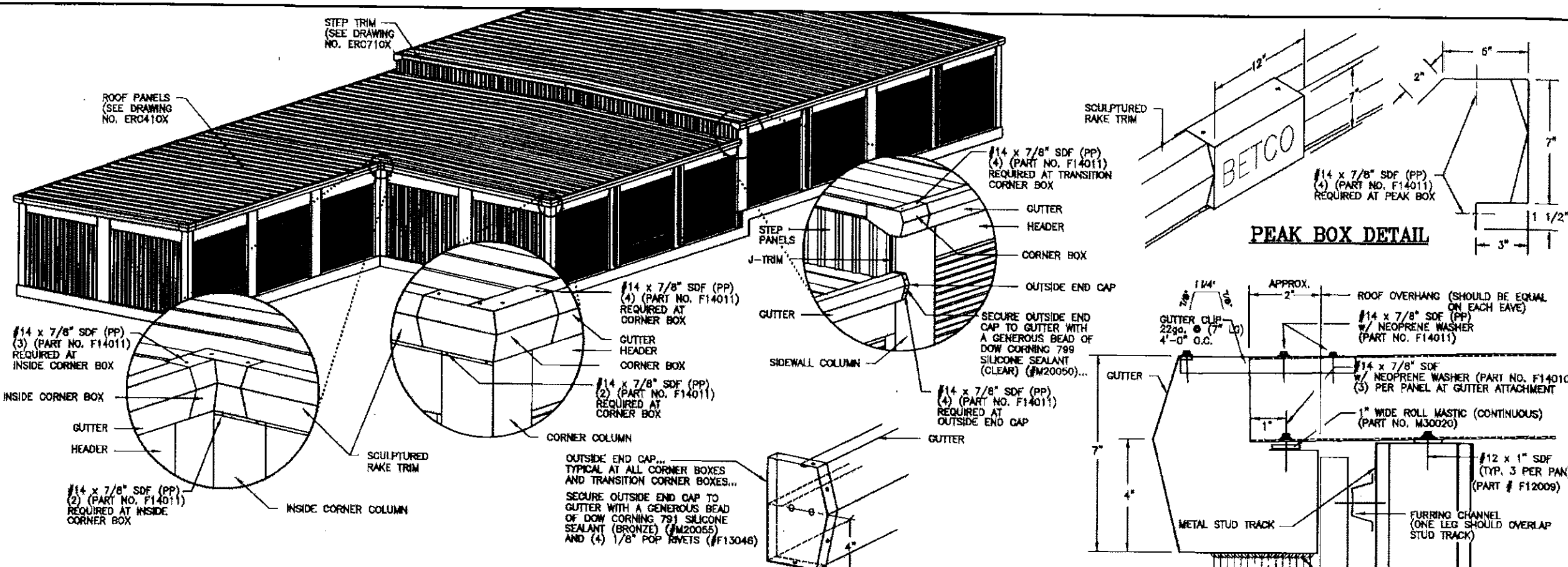
REVISED FASTENER SIZE	1/15/03	JCM
REVISED GUTTER JOINT DETAIL	10/9/02	JCM
CHANGED INSIDE END CAP TO OUTSIDE END CAP	12/13/00	BOL
REVISED DOWNSPOUTS	07/10/00	JCM
GENERAL REVISIONS	03/19/99	FOX
REVISIONS	DATE	BY



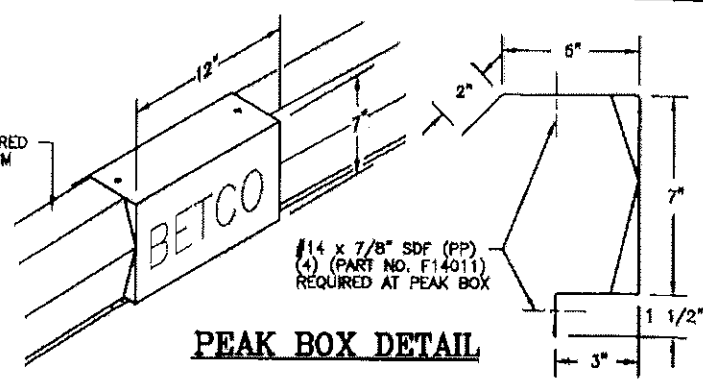
SHEET TITLE:
Sculptured Rake Trim, Extended Gutters and Downspouts

DRAWN BY: C/JG
APPROVED BY: NTS
DATE: 4/7/98
DRAWING NUMBER: ERC505X

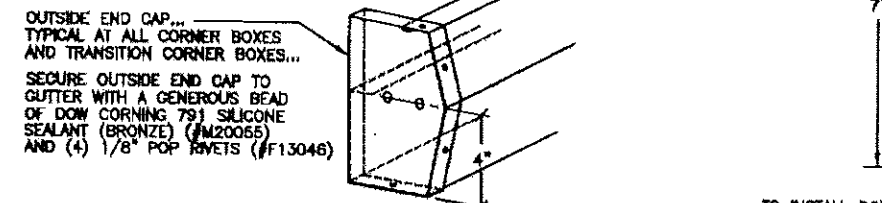
228 COMMERCE BLDG. STATESVILLE, NC 28625 (800)654-7813



PEAK BOX DETAIL

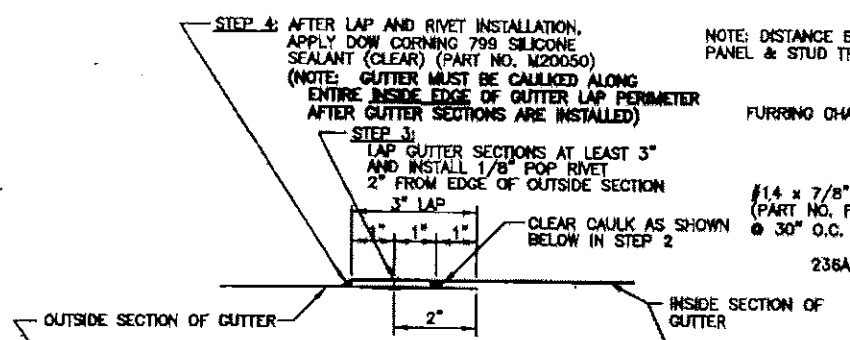


INSTALLATION DETAIL FOR OUTSIDE END CAP WITHIN CORNER BOXES

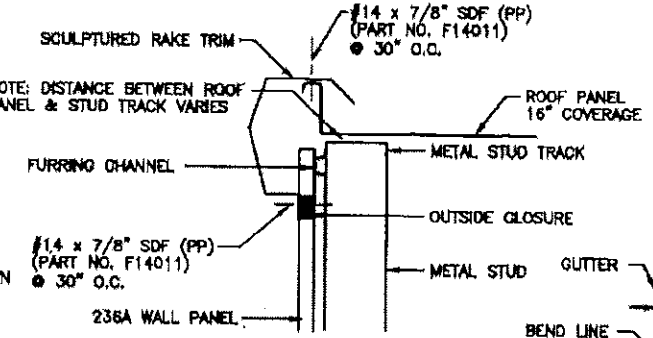


TO INSTALL DOWNSPOUT CUT A 3 1/4\"/>

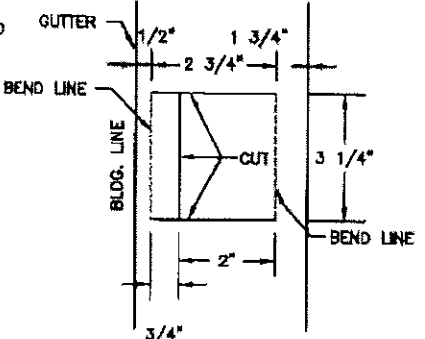
SECTION AT GUTTER LAP JOINT



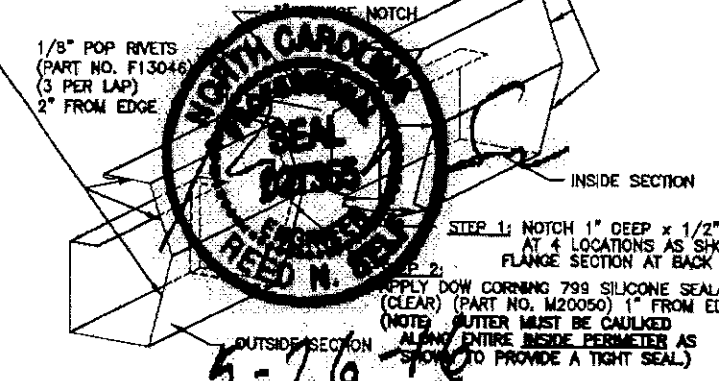
SECTION AT RAKE AT STUDWALL



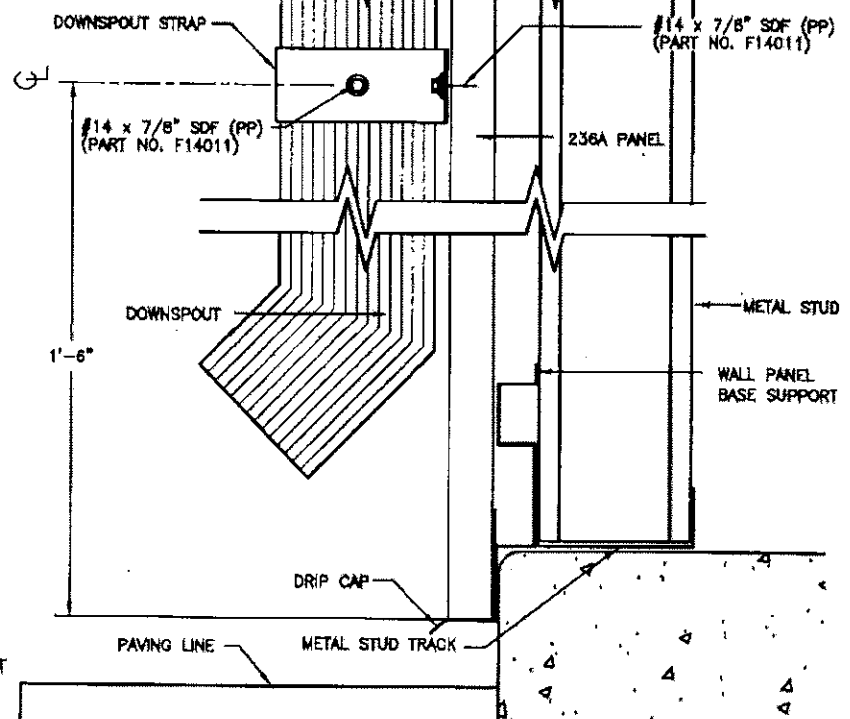
TYPICAL DOWNSPOUT OPENING



NOTE: SHOWN FOR A 3\"/>



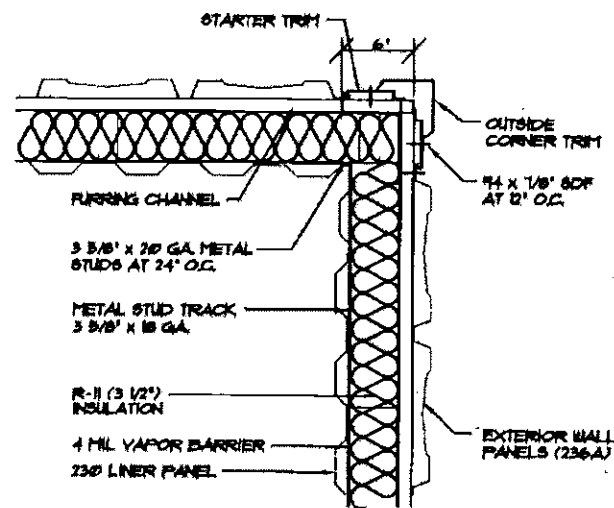
TYPICAL GUTTER LAP JOINT



REVISION	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	10/28/02	JCM
REVISED STUDWALL NOTES	8/28/02	BAM
CHANGED INSIDE END CAP TO OUTSIDE END CAP	12/13/00	BDL



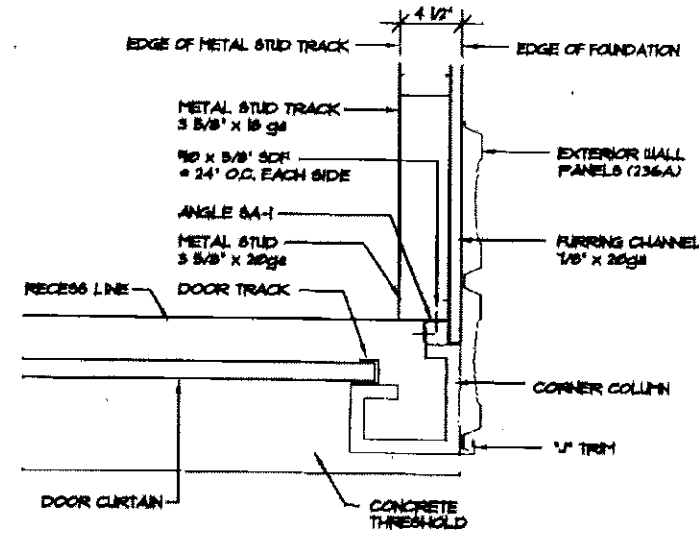
SHEET TITLE		DRAWING NUMBER	
Sculptured Rake Trim, Extended Gutters and Downspouts at Studwall		ERC506X	
DRAWN BY: CjG	APPROVED BY:	SCALE: NTS	DATE: 4/7/98



INSULATED STUDWALL CORNER DETAIL

A

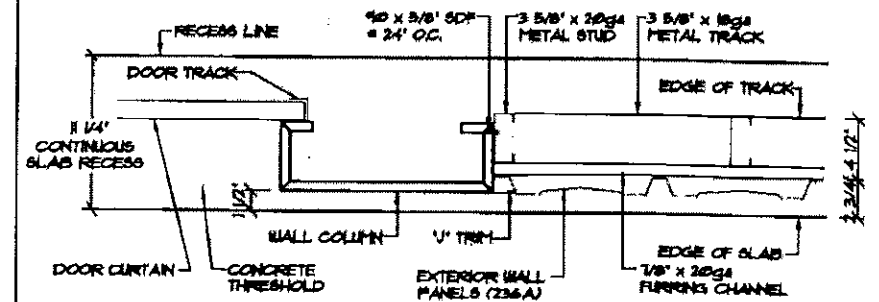
NOT TO SCALE



STUDWALL CONSTRUCTION @ CORNER COLUMN

C

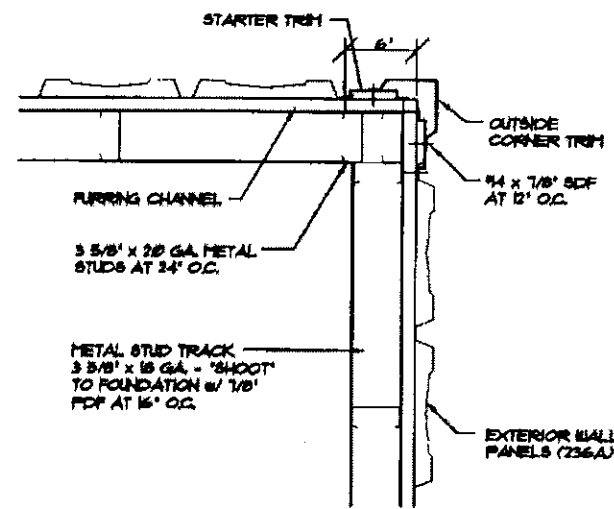
NOT TO SCALE



STUDWALL CONSTRUCTION @ WALL COLUMN IN RECESS

E

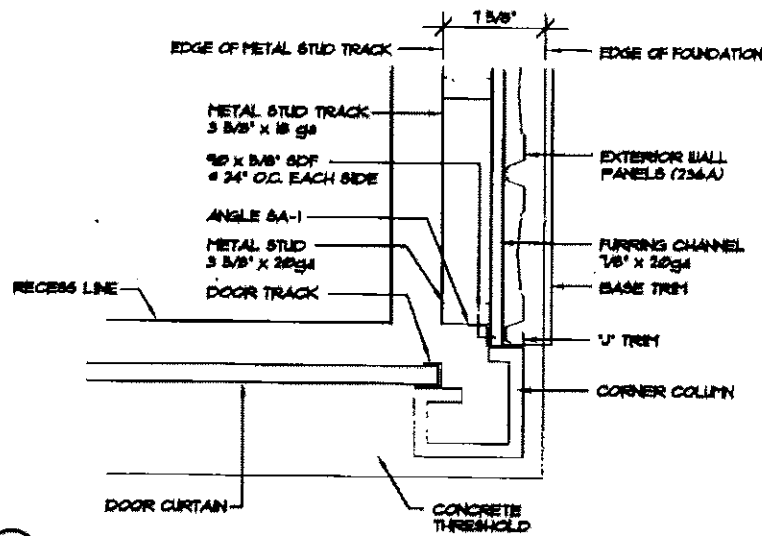
NOT TO SCALE



UNINSULATED STUDWALL CORNER DETAIL

B

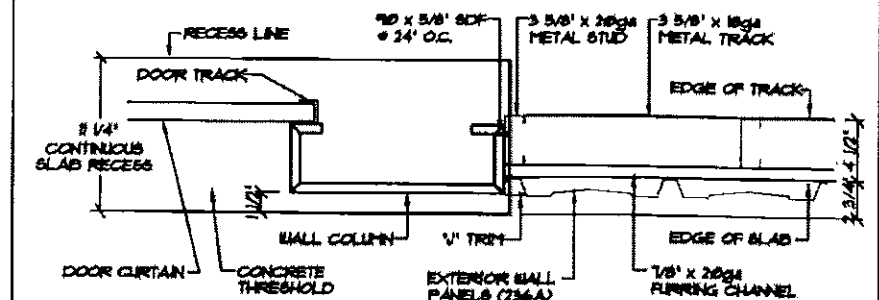
NOT TO SCALE



STUDWALL CONSTRUCTION @ CORNER COLUMN W/ THRESHOLD

D

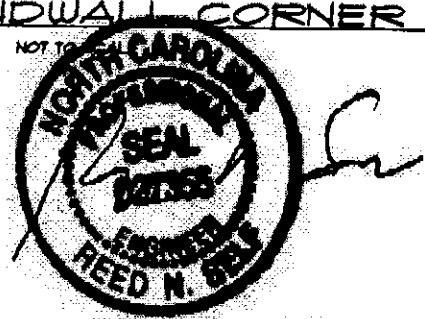
NOT TO SCALE



STUDWALL CONSTRUCTION @ WALL COLUMN

F

NOT TO SCALE



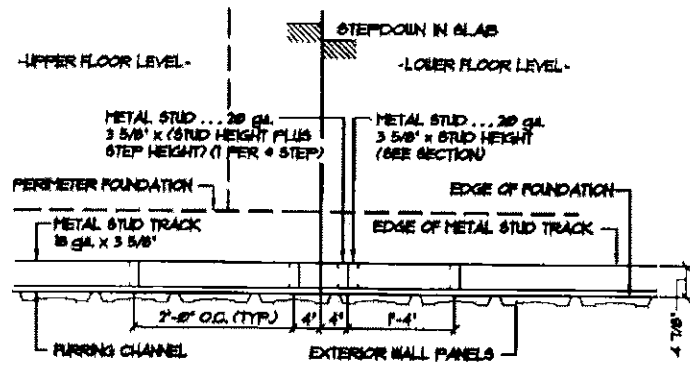
5-26-16

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

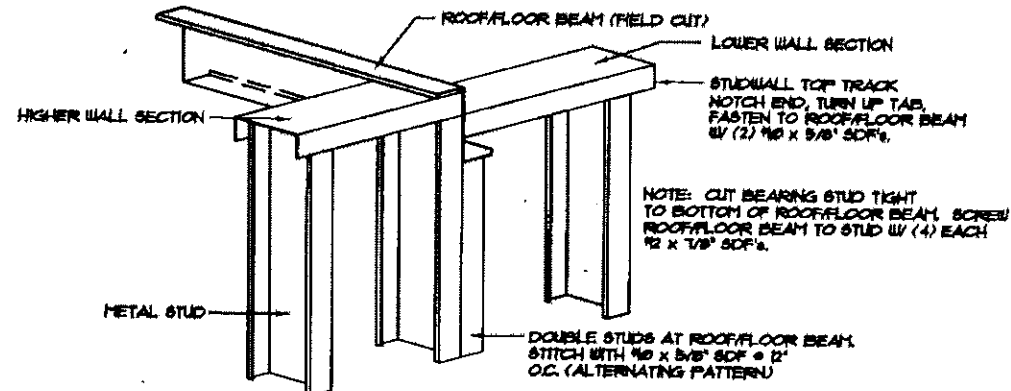


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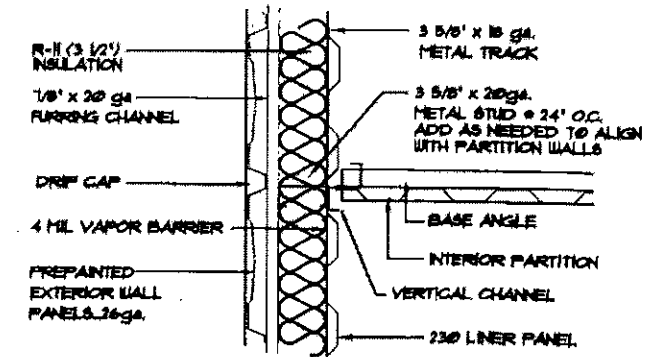
SHEET TITLE: Studwall Details		
DRAWN BY: CJG	APPROVED BY:	DRAWING NUMBER: ERC600X
SCALE: NTS	DATE: 4/14/00	



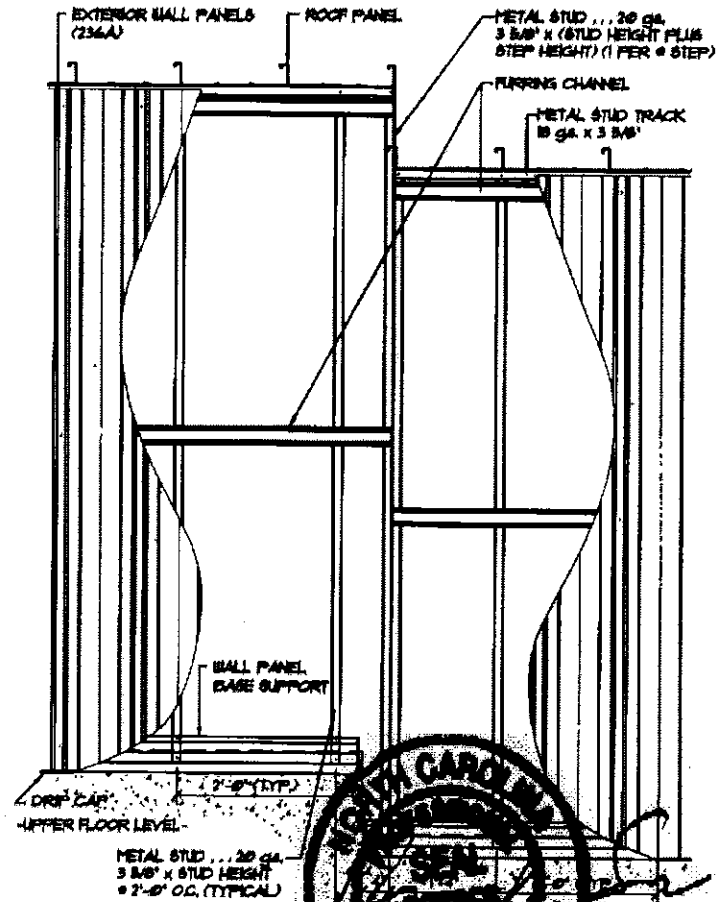
(A) PLAN VIEW OF STUDWALL @ FLOOR STEPDOWN
NOT TO SCALE



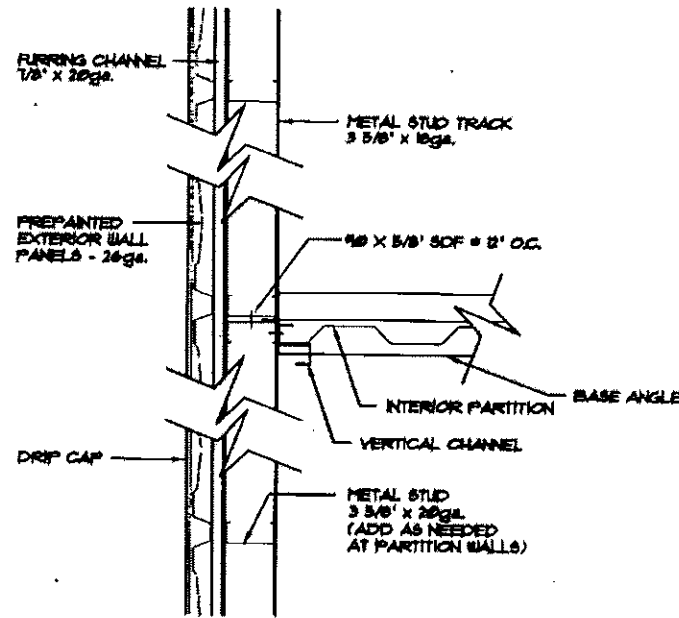
(C) ROOF/FLOOR BEAM @ STUDWALL
NOT TO SCALE



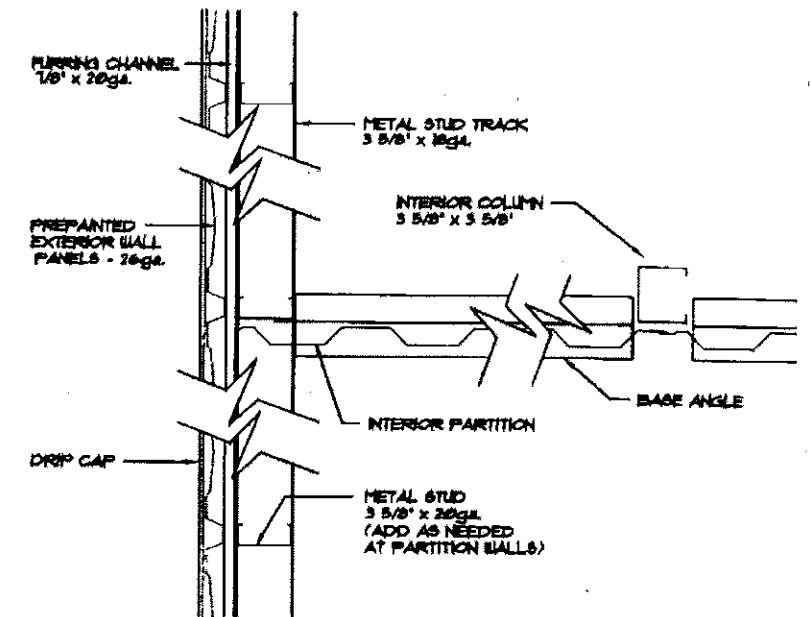
(E) PARTITION INSTALLATION AT INSULATED EXTERIOR STUDWALL
NOT TO SCALE



(B) ELEVATION OF STUDWALL AND STEPDOWN
NOT TO SCALE



(D) PARTITION INSTALLATION UNDER ROOF BEAM
NOT TO SCALE



(F) PARTITION INSTALLATION AT STUDWALL
NOT TO SCALE

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

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SHEET TITLE: Studwall Details		
DRAWN BY: CJG	APPROVED BY:	DRAWING NUMBER: ERC601X
SCALE: NTS	DATE: 4/14/00	



5-26-16

① **EXTERIOR STUDWALL CONSTRUCTION • FLAT SLAB:**
(SEE ERC620X)

- 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. EMBEDMENT) @ 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 ERC620X)

- 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. EMBEDMENT) @ 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:**

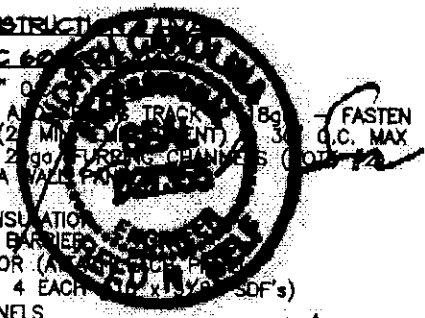
- 3 5/8" METAL STUDS @ 24" O.C. - 20ga
- 3 5/8" CONTINUOUS FLOOR AND CEILING TRACK - 18ga. - FASTEN w/ 3/8" x 3" WEDGE ANCHOR (2" MIN. EMBEDMENT) @ 30" O.C. MAX
- 3 1/2" THICK FIBERGLASS INSULATION
- 4 MIL POLYETHYLENE VAPOR BARRIER
- 230 LINER PANELS (EACH SIDE-ATTACH EACH PANEL TO TOP & BASE TRACK 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 • INSET/ALCOVE:** (ERC 620X & 621X)

- 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. EMBEDMENT) @ 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.



5-26-16

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 • U475... (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. EMBEDMENT) @ 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... 1 HOUR RATED**
UL • U423... (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. EMBEDMENT) @ 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. EMBEDMENT) @ 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. EMBEDMENT) @ 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 8'-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.

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



SHEET TITLE: Studwall Notes

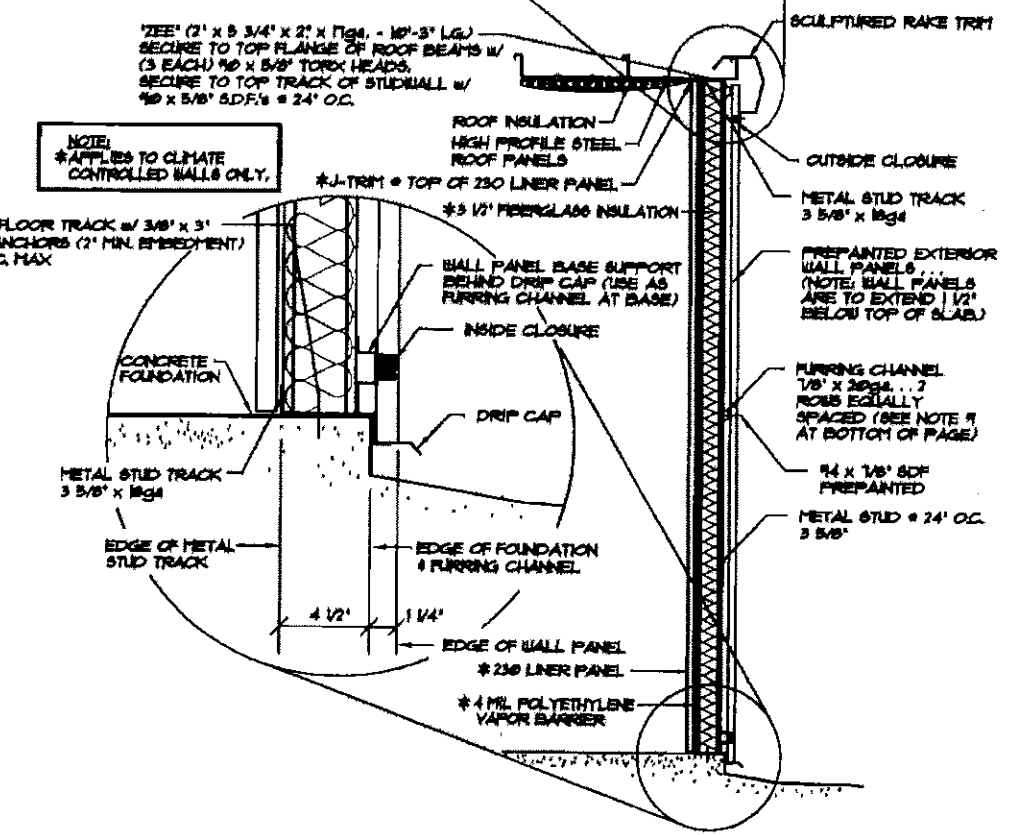
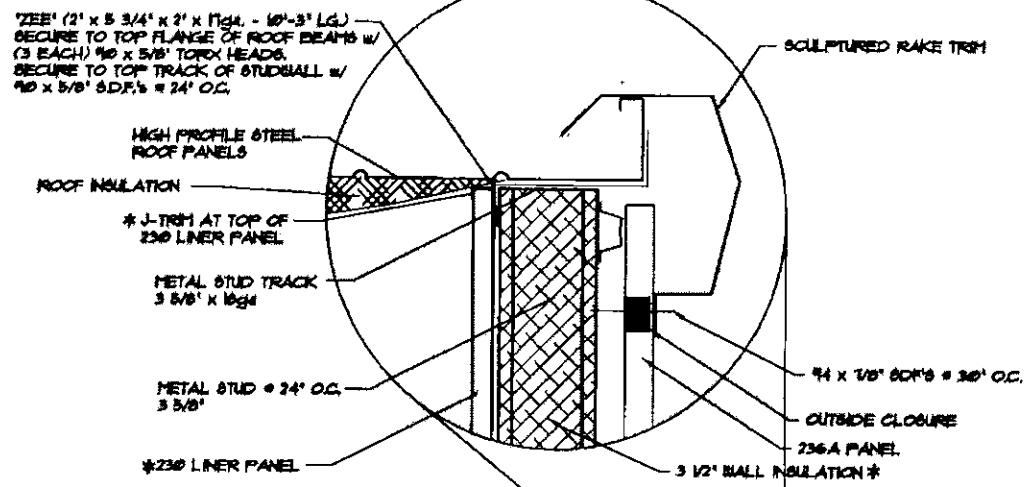
DRAWN BY: RS

APPROVED BY:

DRAWING NUMBER: ERC610X

SCALE: NTS

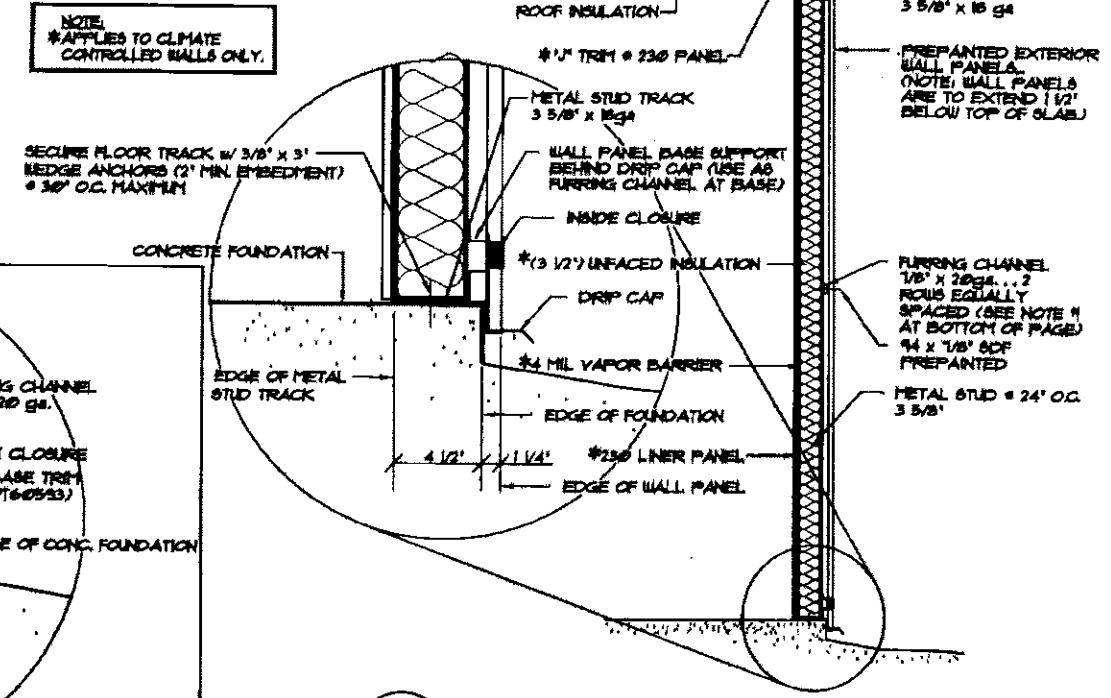
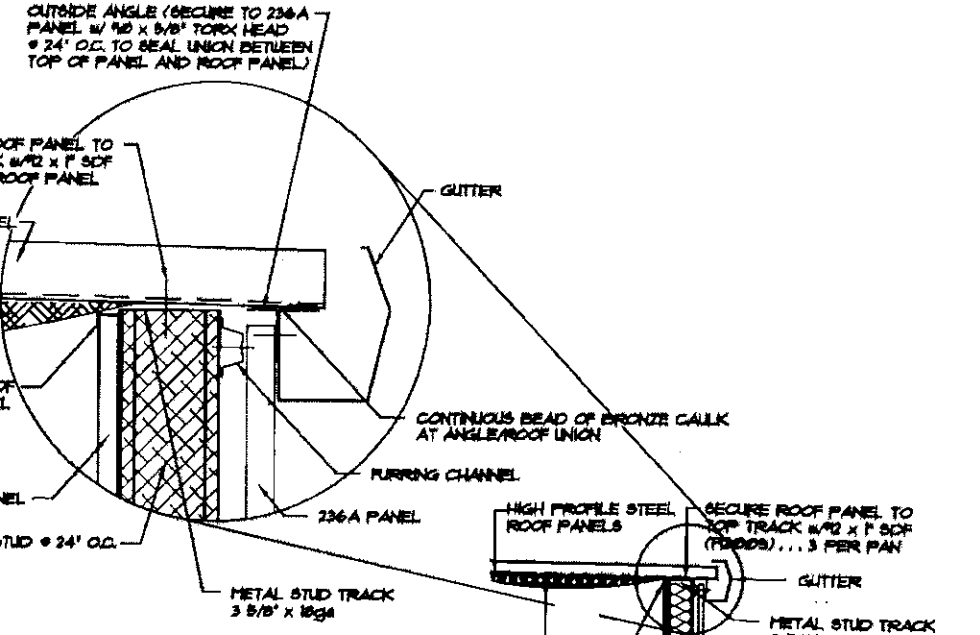
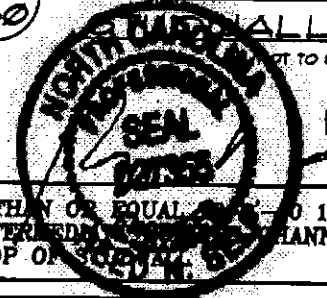
DATE: 11/02/00



A SECTION AT EXTERIOR WALL ENDWALL
630 NOT TO SCALE

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

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



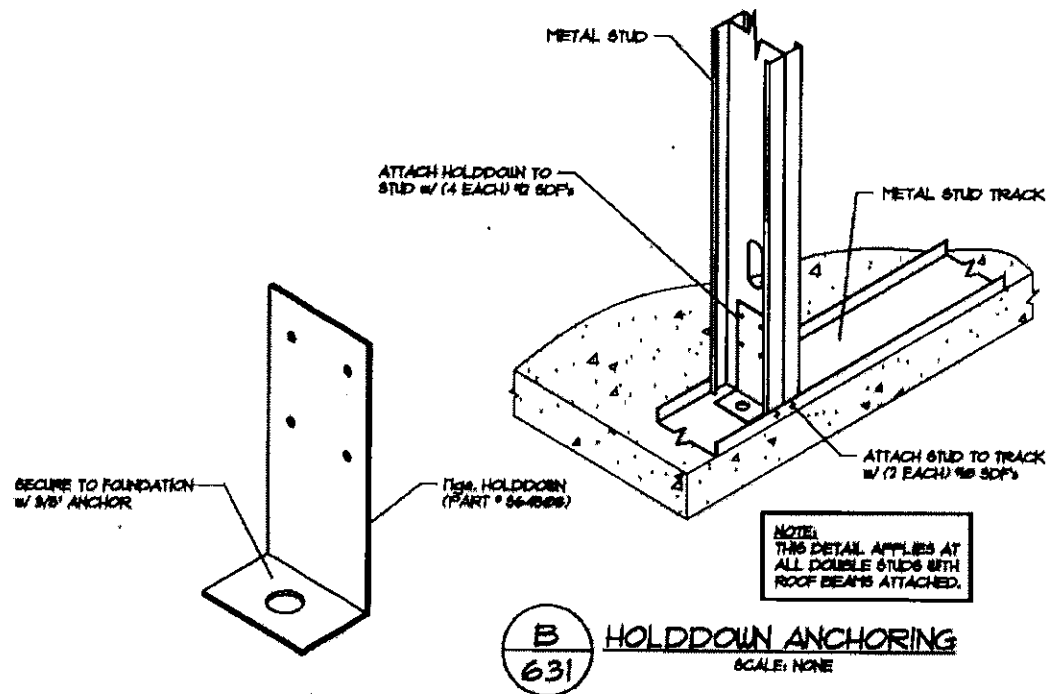
BASE CONDITION FOR STUDWALL IN RECESS

B SECTION AT EXTERIOR STUDWALL SIDEWALL
630 NOT TO SCALE

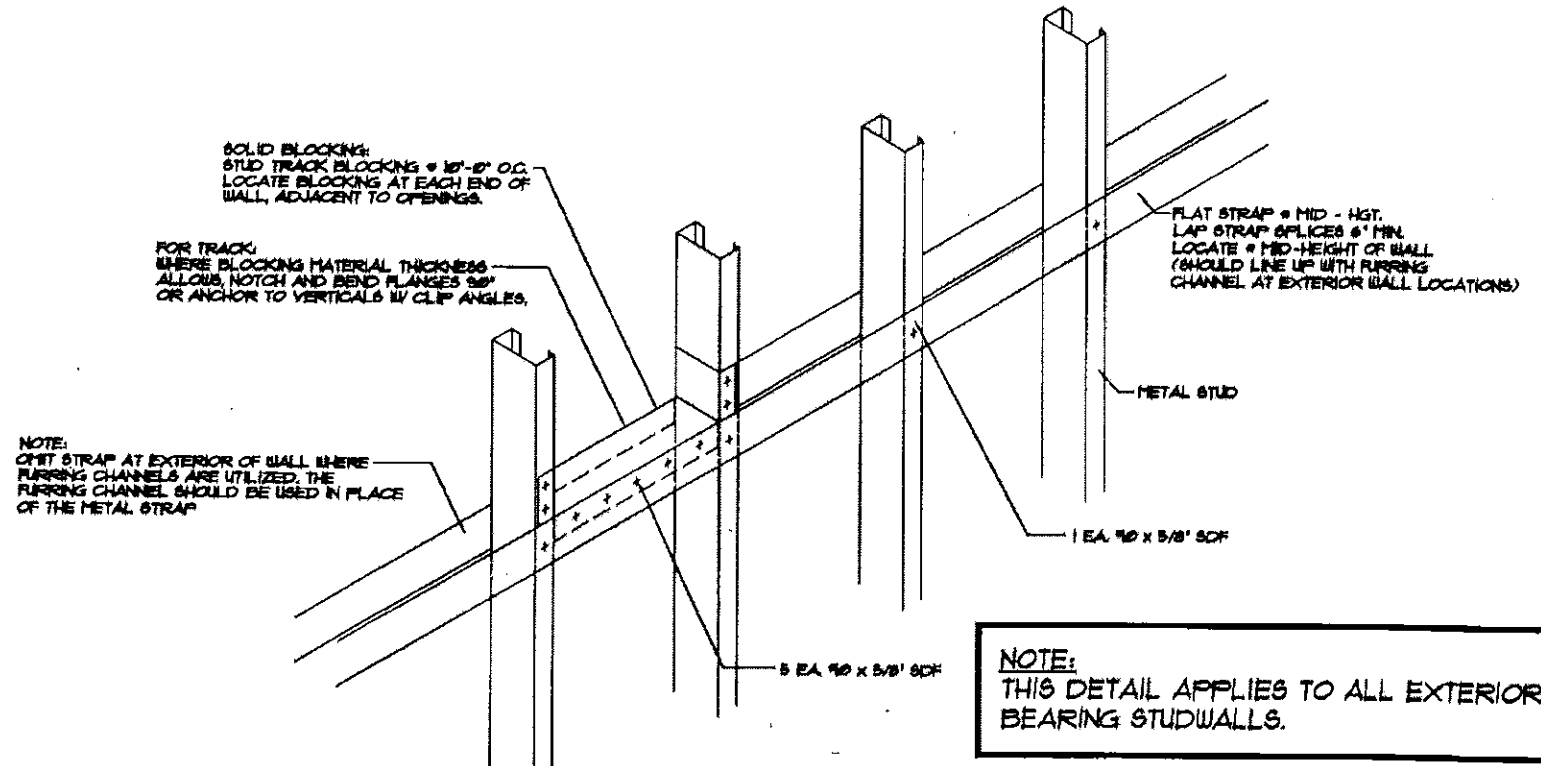
REVISIONS	DATE	BY

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STATESVILLE, NC 28625
(800)654-7813

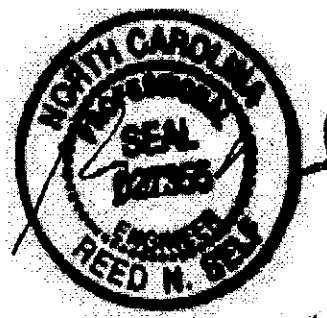
SHEET TITLE: Studwall Sections		
DRAWN BY: JCM	APPROVED BY:	DRAWING NUMBER: ERC630X
SCALE: NTS	DATE: 11/8/11	



B
631
HOLDDOWN ANCHORING
SCALE: NONE



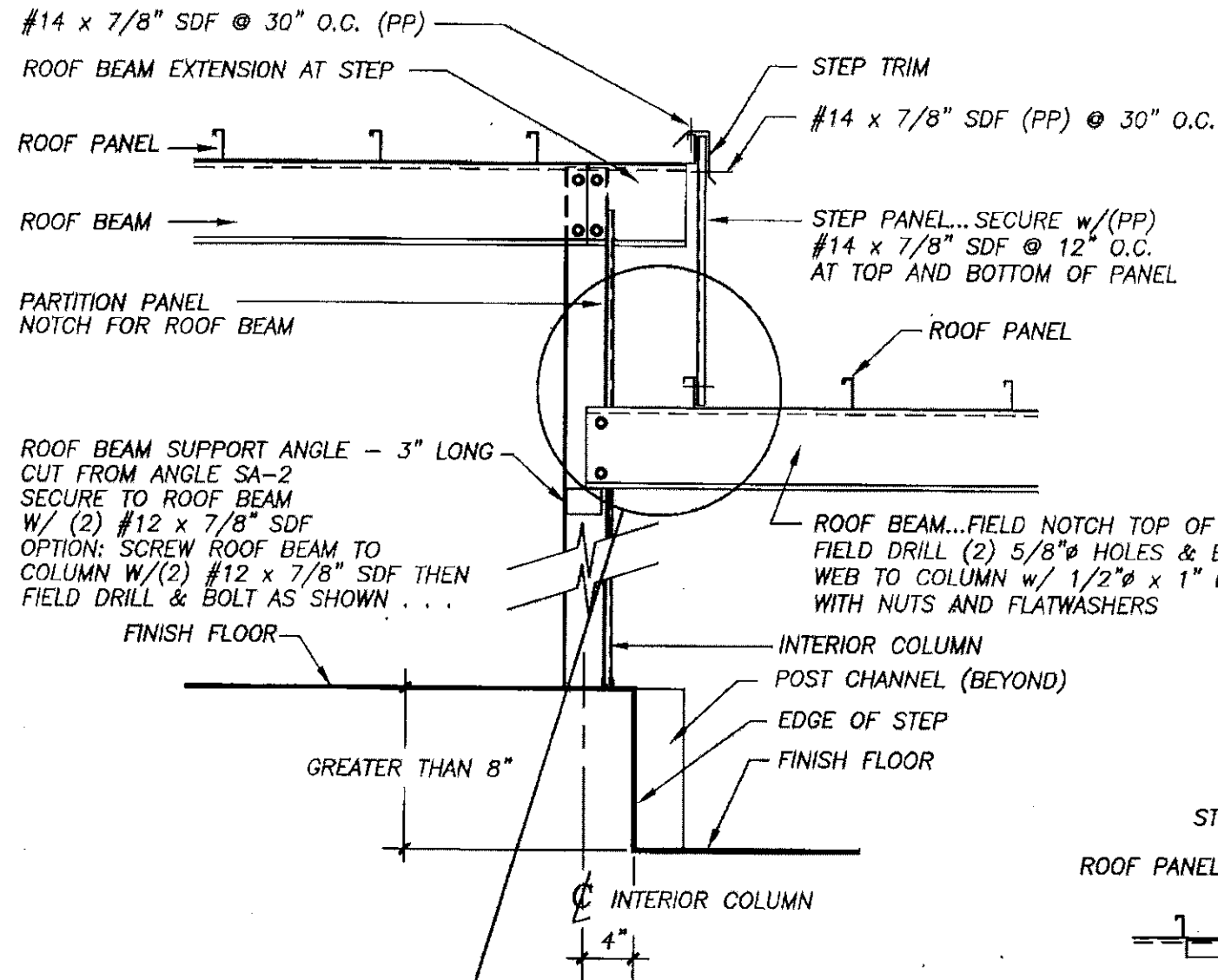
A
631
WALL BLOCKING DETAIL
SCALE: NONE



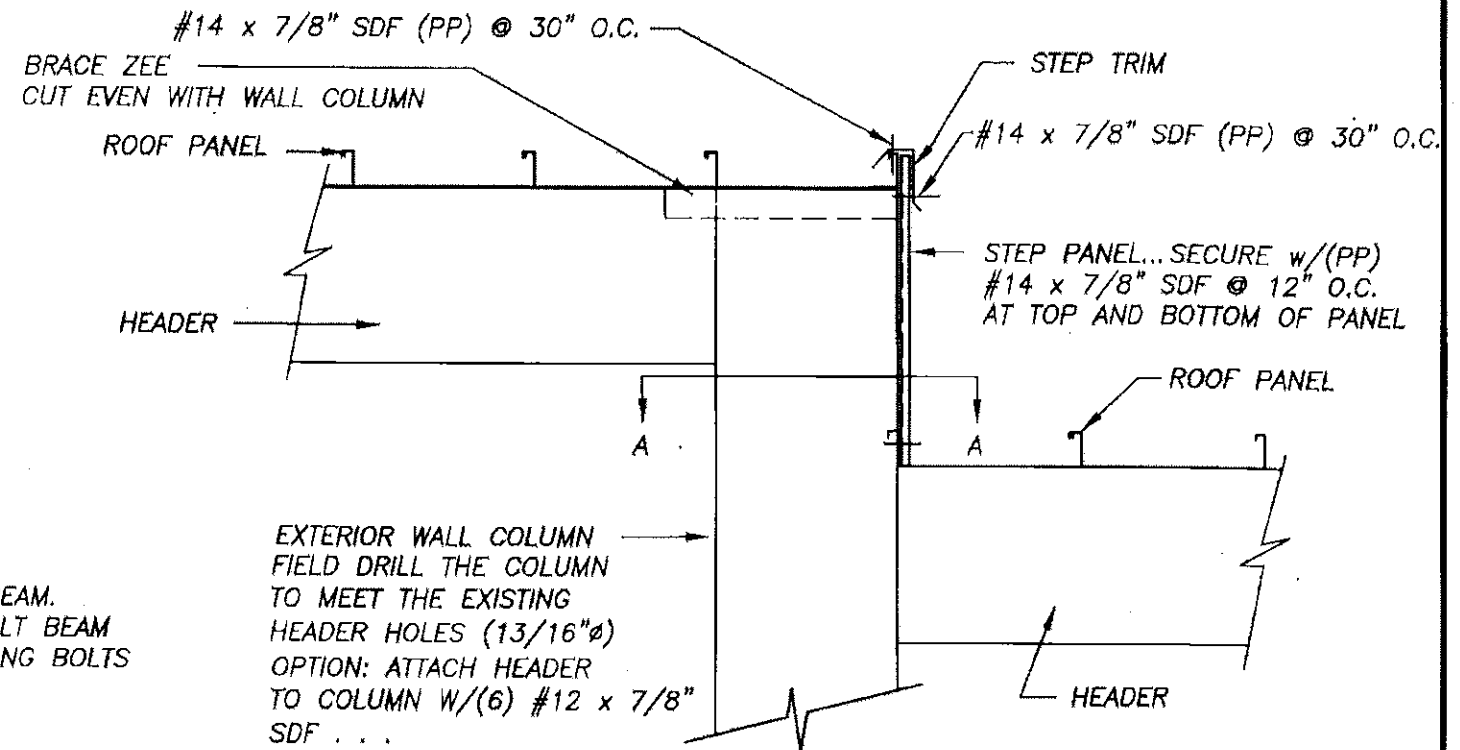
5-26-16

REVISIONS	DATE	BY

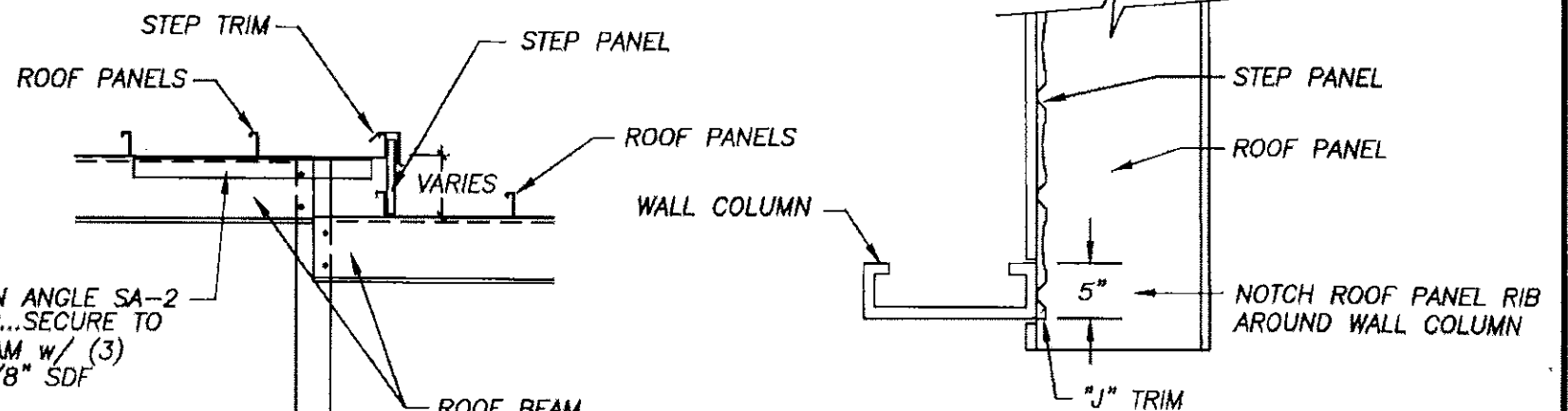
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			DRAWN BY: JCM	APPROVED BY:
SCALE: NTS		DATE: 11/8/11		



TYPICAL STEPDOWN SECTION

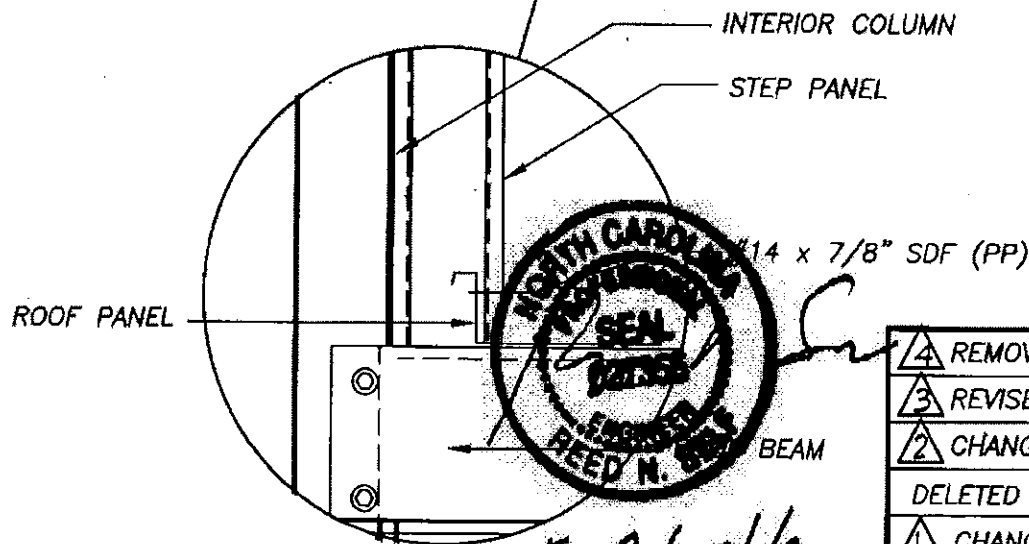


TYPICAL STEPDOWN ELEVATION



DETAIL AT ROOF STEP 8" OR LESS

SECTION A-A



5-26-16

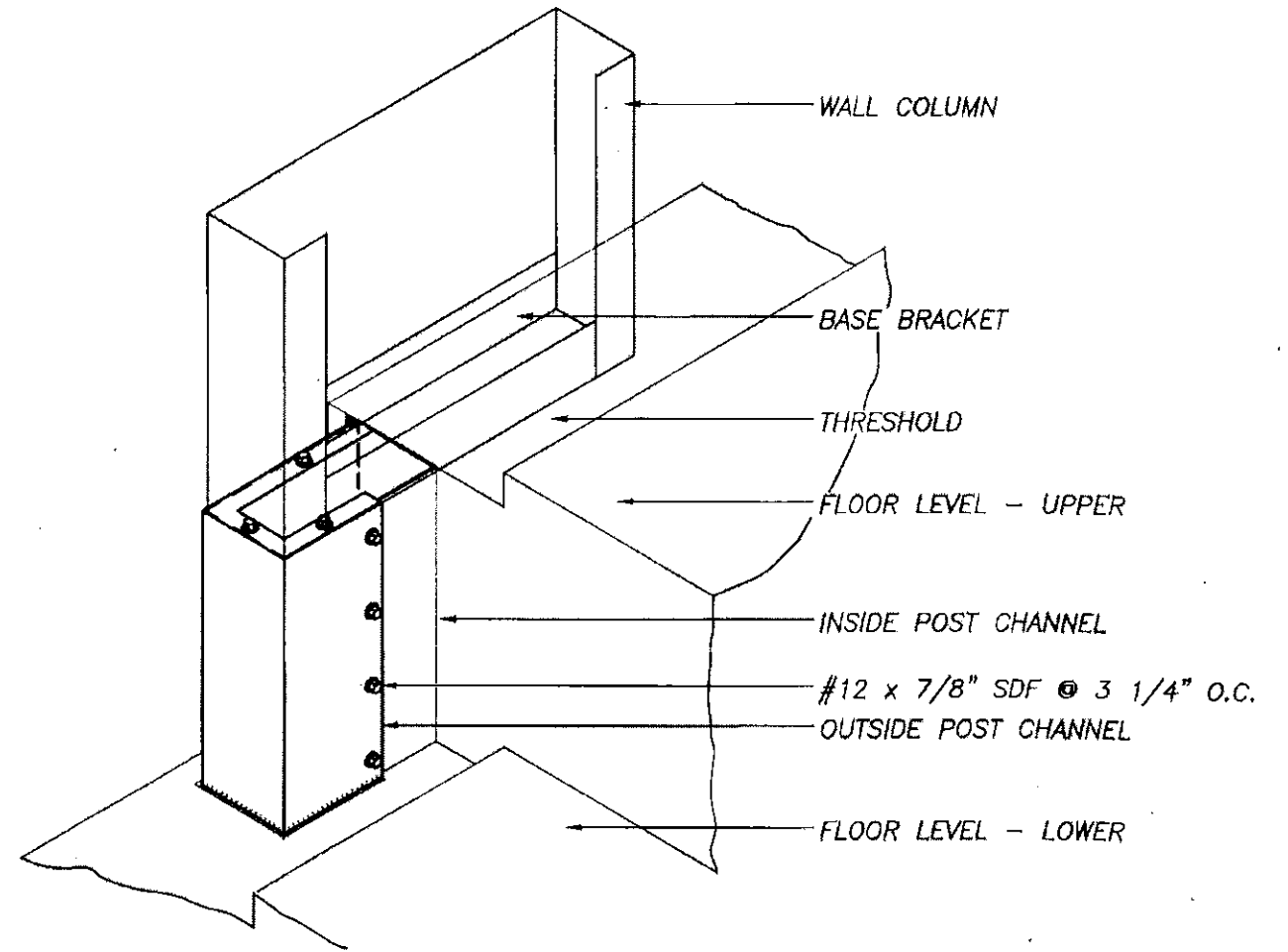
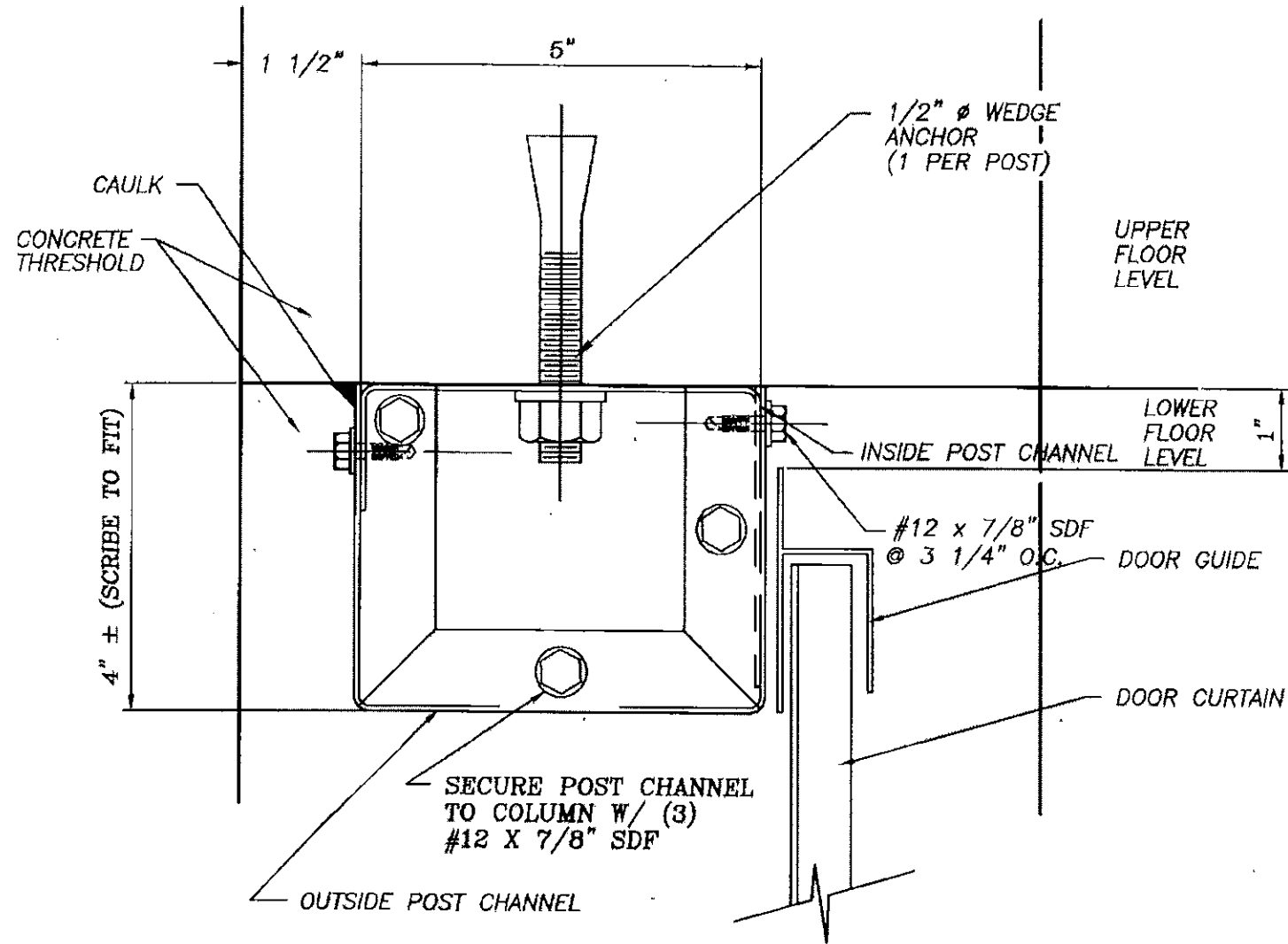
REVISIONS	DATE	BY
4	2/16/04	JCM
3	1/15/03	JCM
2	10-9-01	SBJ
DELETED SA-1 AT TYPICAL STEP DOWN SECTION		
1	4-8-99	CWM



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SHEET TITLE: STEPDOWN SECTIONS (Roof and Floor)		
DRAWN BY: J Pope	APPROVED BY:	DRAWING NUMBER: ERC710X
SCALE: NTS	DATE: 6-29-94	

NOTE: SCRIBE OUTSIDE POST CHANNEL (9" LEG) TO FIT AGAINST CONCRETE. THEN APPLY CAULK OVER SEAM TO SEAL CUT EDGES. TRIM BOTTOM AS NEEDED. CAULK AROUND BOTTOM TO SEAL CUT EDGE. FASTEN W/(4) PREPAINTED #14 X 7/8" SDF SCREWS @ 3 1/4" O.C. ON OUTSIDE FACE OF OUTSIDE POST CHANNEL. FASTEN OUTSIDE POST CHANNEL TO WALL COLUMN W/ (3) #12 X 7/8" S.D.F.



**POST CHANNEL DETAIL
AT FLOOR STEP**

PLAN VIEW @ POST CHANNEL

NOTE: POST CHANNEL CAN BE ATTACHED TO EXTERIOR WALL COLUMN AFTER FITTING POST CHANNEL TO CURTAIN AND BEFORE WALL COLUMN IS SET IN PLACE TO LESSEN THE DISTANCE OF INSTALLING #12 SCREWS.



5-26-16

REVISIONS	DATE	BY
△ REVISED FASTENER SIZE	1/15/03	JCM
△ GENERAL REVISIONS	3-8-99	FOX

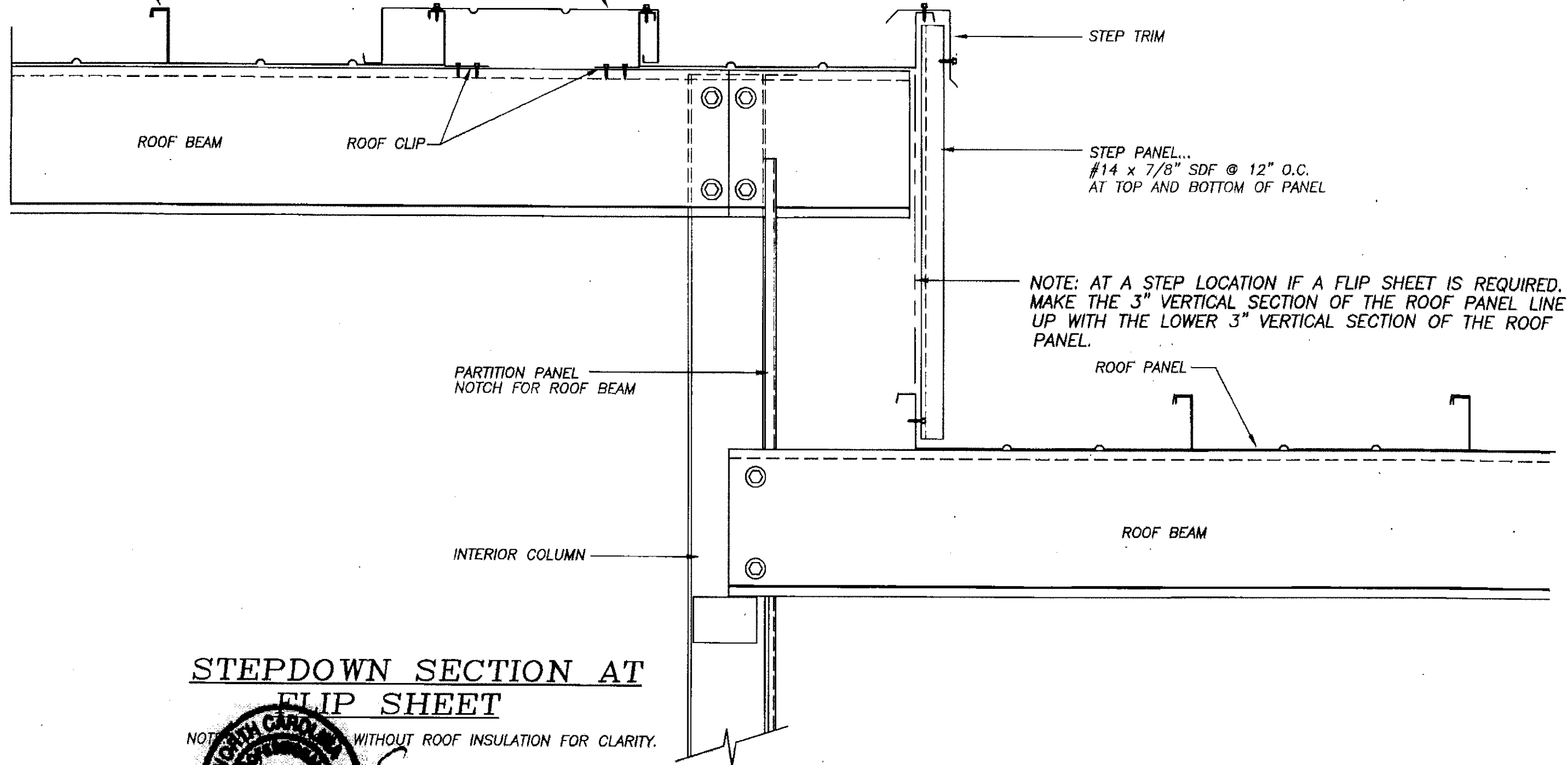
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SHEET TITLE: Post Channel Details		
DRAWN BY: J Pope	APPROVED BY:	DRAWING NUMBER: ERC712X
SCALE: NTS	DATE: 6-28-94	

ROOF PANEL

FLIP SHEET

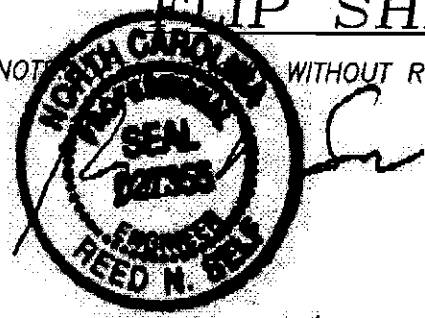
*NOTE: SEE ERC710X AND/OR ERC711X FOR TYPICAL STEP DOWN DETAILS



NOTE: AT A STEP LOCATION IF A FLIP SHEET IS REQUIRED, MAKE THE 3\"

STEPDOWN SECTION AT FLIP SHEET

NOTE: NORTH CAROLINA WITHOUT ROOF INSULATION FOR CLARITY.



5-26-16

REVISIONS	DATE	BY

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 STATESVILLE, NC 28625
 (800)654-7813

SHEET TITLE: STEPDOWN SECTION AT ROOF FLIP SHEET		
DRAWN BY: JENKINS	APPROVED BY:	DRAWING NUMBER: ERC713X
SCALE: NTS	DATE: 10-10-01	