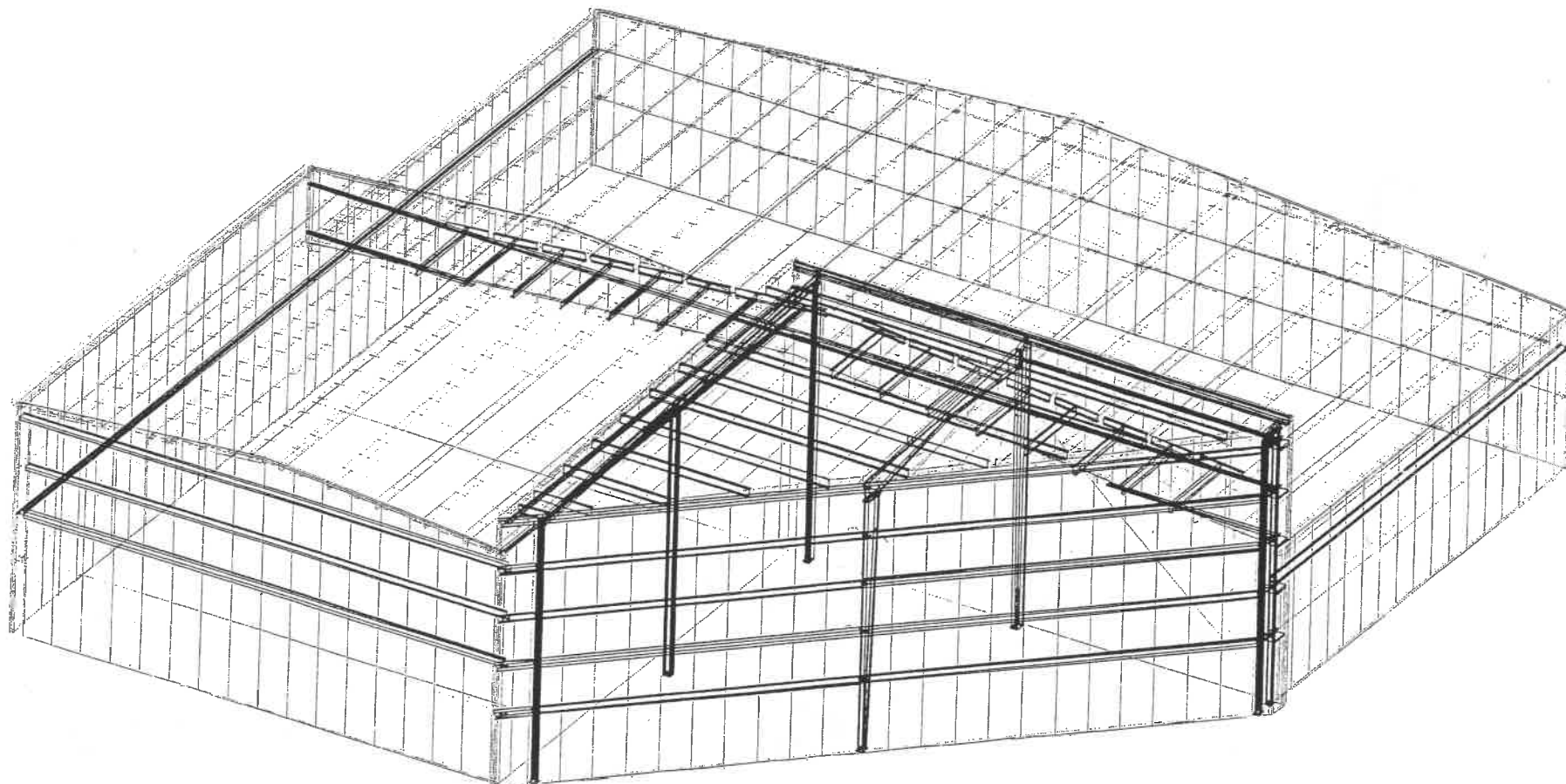




VP BUILDINGS

VARCO-PRUDEN

| DRAWING INDEX | | DRAWING RELEASE HISTORY | | |
|---------------------------|-------|-------------------------|------|---------------------------|
| DRAWING TITLE | PAGES | TYPE | DATE | DESCRIPTION |
| Cover Sheet | 1 | ANCHOR BOLT | | FOR CONSTRUCTION |
| Notes | | | | FOR CONSTRUCTION |
| Anchor Bolt Plan | | | | |
| Primary Structural | | | | |
| Secondary Structural | | | | |
| Covering | | | | |
| Special Drawings | | | | |
| Standard Erection Details | | | | |
| | | | | BLDG FOR AGRICULTURAL USE |



GENERAL NOTES

MATERIALS

3 PLATE WELDED SECTIONS
 COLD FORMED LIGHT GAGE SHAPES
 BRACE RODS
 HOT ROLLED MILL SHAPES
 HOLLOW STRUCTURAL SECTION (HSS)
 CLADDING

ASTM DESIGNATION

A529, A572, A1011 SS
 A1011 SS
 A572
 A36, A572, A529, A992
 A500
 A653, A792
 GRADE 50
 GRADE 55
 GRADE 65
 GRADE 36 KSI OR GRADE 50
 GRADE B
 GRADE 50 CLASS 2 OR GRADE 80

A325 BOLT TIGHTENING REQUIREMENTS

IT IS THE RESPONSIBILITY OF THE ERECTOR TO INSURE PROPER BOLT TIGHTNESS IN ACCORDANCE WITH APPROPRIATE REGULATIONS. THE FOLLOWING CRITERIA IS IN COMPLIANCE WITH THE LATEST SPECIFICATIONS, HOWEVER THE ERECTOR IS RESPONSIBLE TO VERIFY LOCAL AUTHORITY REQUIREMENTS.
 ALL CONNECTIONS MADE WITH A325 BOLTS MAY BE TIGHTENED TO THE "SNUG TIGHT" CONDITION AS PERMITTED BY THE SPECIFICATION FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS (2000 ED.), UNLESS INDICATED AS "PRE-TENSIONED" ELSEWHERE IN THESE DRAWINGS, OR AS INDICATED BELOW.

PRE-TENSION BOLTS ON PRIMARY FRAMING, BOLTED BRACING, AND STRUT CONNECTIONS, IF LOCATED IN SEISMIC PERFORMANCE / DESIGN CATEGORY D, E OR F (ZONE 3 OR 4). SEE CODES AND LOADS NOTES BELOW FOR SEISMIC DESIGN CATEGORY.

PRE-TENSION BOLTS ON PRIMARY FRAMING, BOLTED BRACING, STRUTS AND CRANE RUNWAY CONNECTIONS IF BUILDING SUPPORTS A CRANE WITH A CAPACITY GREATER THAN 5 TONS.

CONNECTIONS THAT SUPPORT RUNNING MACHINERY AND OTHER SOURCES OF IMPACT OR STRESS REVERSAL MUST BE PRE-TENSIONED.

ALL SLIP CRITICAL CONNECTIONS AS INDICATED IN THESE DRAWINGS WITH -SC DESIGNATION MUST BE PRE-TENSIONED. SC TYPE CONNECTIONS MUST BE FREE OF PAINT, OIL OR OTHER MATERIALS THAT REDUCE THE FRICTION AT CONTACT SURFACES.

ALL A490 BOLTS MUST BE PRE-TENSIONED WITH WASHERS UNDER TURNED ELEMENT.

SECONDARY MEMBERS AND FLANGE BRACE CONNECTIONS ARE ALWAYS "SNUG TIGHTENED", EVEN IF ABOVE CONDITIONS EXIST, UNLESS SPECIFICALLY NOTED OTHERWISE ON DETAILS. WASHERS ARE NOT REQUIRED FOR "SNUG-TIGHT" CONNECTIONS. PRE-TENSIONED CONNECTIONS TIGHTENED USING THE TURN-OF-THE-NUT METHOD DO NOT REQUIRE WASHERS.

CODES AND LOADS

WHEN MULTIPLE BUILDINGS ARE INVOLVED, SPECIFIC LOAD FACTORS FOR DIFFERING OCCUPANCIES, BUILDING DIMENSIONS, HEIGHTS, FRAMING SYSTEMS, ROOF SLOPES, ETC., MAY RESULT IN DIFFERENT LOAD APPLICATION FACTORS THAN INDICATED BELOW. SEE CALCULATIONS FOR FURTHER DETAILS.

Building Code: 2002 Ohio Building Code
 Based on Building Code: 2000 International Building Code
 Storage: Building Use: Standard Occupancy Structures,
 LIVE LOADS AND RAINFALL
 Live Load 20.00 psf (Reducible)
 Rainfall: 5.00 in per hour

COLLATERAL GRAVITY = 0 psf

SNOW LOAD
 Ground Snow: 20.00 psf, Flat Roof Snow: 20.00 psf
 Snow Exposure Category (Factor): 1 Fully Exposed (0.90)
 Snow Importance: 1.000 Thermal Category (Factor): Unheated (1.20)

WIND LOAD
 Wind Speed: 90.00 mph, Wind Exposure: B
 Basic Wind Pressure: 12.35 psf
 Wind Importance Factor: 1.000, Ft= Topographic Factor: 1.0000
 Wind Enclosure: Open

Note: If the building is design as ENCLOSED, all windows, doors, skylights and other covered openings must be designed for the specified above wind loads

EARTHQUAKE DESIGN DATA
 Lateral Force Resisting Systems using Equivalent Force Procedure, System NOT detailed for
 Mapped Spectral Response - Ss: 22.00 %g, S1: 7.00 %g
 Seismic Hazard / Use Group: Group 1
 Seismic Performance / Design Category: B (See Bolt Tightening Note Above)
 Seismic Snow Load: 0.00 psf
 Seismic Importance: 1.000
 Soil Profile Type: Stiff soil (D, 4)
 Design Spectral Response - Sds: 0.2347, Sd1: 0.1120

Ordinary Steel Moment Frames
 Frame Redundancy Factor: 1.0000
 Framing R-Factor: 4.0000, Frame Seismic Factor (Cs): 0.0587, Design Base Shear = 0.0587 W
 Ordinary Steel Concentric Braced Frames
 Brace Redundancy Factor: 1.0000
 Bracing R-Factor: 5.0000, Brace Seismic Factor (Cs): 0.0469, Design Base Shear = 0.0469 W

VP Buildings, Inc. 3200 Players Club Circle Memphis TN 38125

1253 Industrial Dr.

THE VP ENGINEER'S SEAL APPLIES ONLY TO THE WORK PRODUCT OF VP AND DESIGN AND PERFORMANCE REQUIREMENTS SPECIFIED BY VP. THE VP ENGINEER'S SEAL DOES NOT APPLY TO THE PERFORMANCE OR DESIGN OF ANY OTHER PRODUCT OR COMPONENT FURNISHED BY VP EXCEPT TO ANY DESIGN OR PERFORMANCE REQUIREMENTS SPECIFIED BY VP.

THIS DRAWING, INCLUDING THE INFORMATION HEREON, REMAINS THE PROPERTY OF VP BUILDINGS.
 IT IS PROVIDED SOLELY FOR ERECTING THE BUILDING DESCRIBED IN THE APPLICABLE PURCHASE ORDER AND SHALL NOT BE MODIFIED, REPRODUCED OR USED FOR ANY OTHER PURPOSE WITHOUT PRIOR WRITTEN APPROVAL OF VP BUILDINGS.

THE GENERAL CONTRACTOR AND/OR ERECTOR IS SOLELY RESPONSIBLE FOR ACCURATE, GOOD QUALITY WORKMANSHIP IN ERECTING THIS BUILDING IN CONFORMANCE WITH THIS DRAWING, DETAILS REFERENCED IN THIS DRAWING, ALL APPLICABLE VP BUILDINGS ERECTION GUIDES, AND INDUSTRY STANDARDS PERTAINING TO PROPER ERECTION, INCLUDING THE CORRECT USE OF TEMPORARY BRACING.



VP BUILDINGS, INC.
 AISC CATG. MB CERTIFIED

COVER SHEET

| | |
|-----------------|--------------------|
| BUILDER | Wortman Bros. Inc. |
| CUSTOMER | |
| LOCATION | Napoleon, Ohio |
| PROJECT | Universal Co-op |
| BUILDER'S P.O.# | |



VP VERSION: 5.1c

| | |
|---------------|-----------|
| JOB # | |
| DATE | |
| DRAWN / CHECK | IPR / IPR |
| PAGE | 1 |

○ Frame Member Schedule

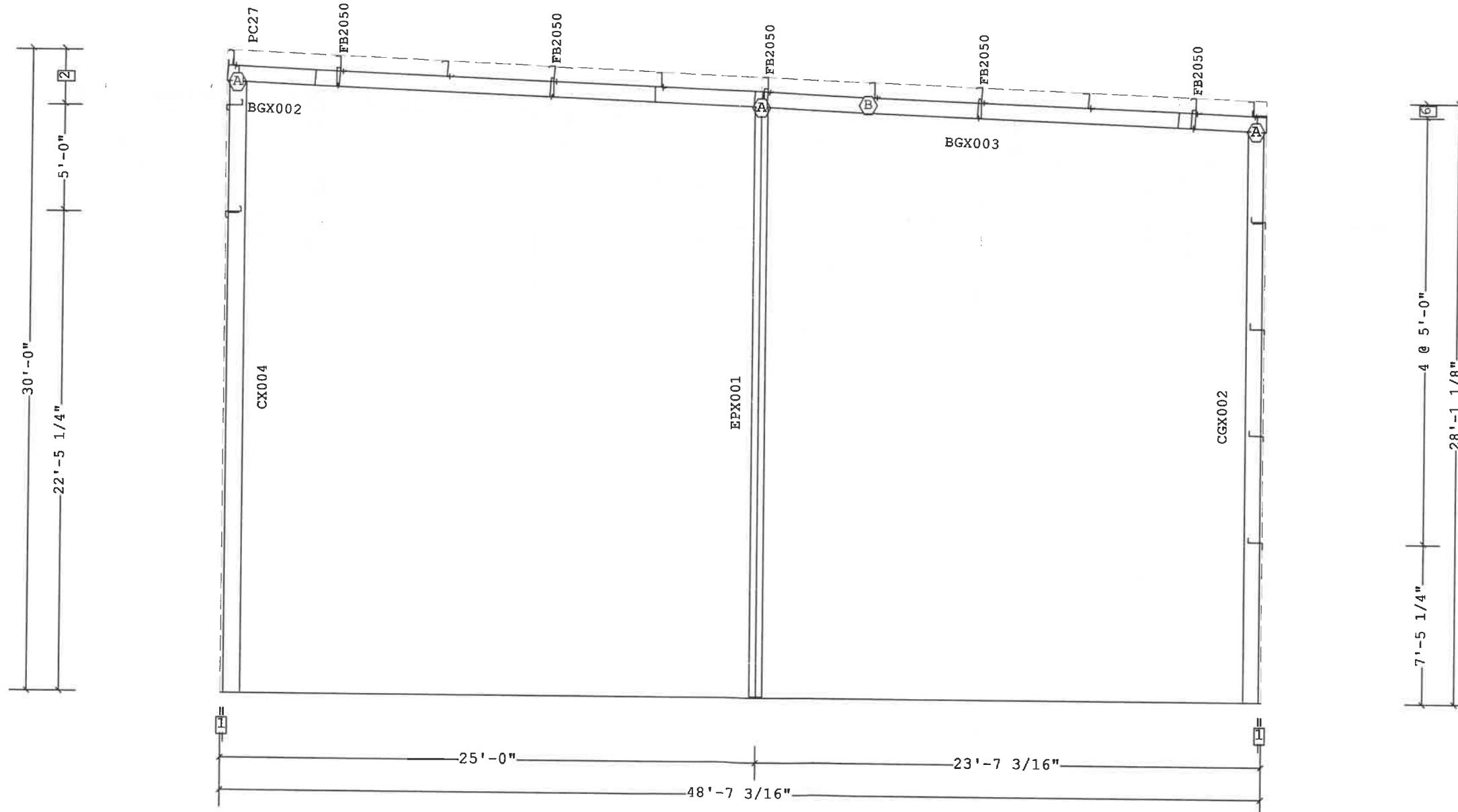
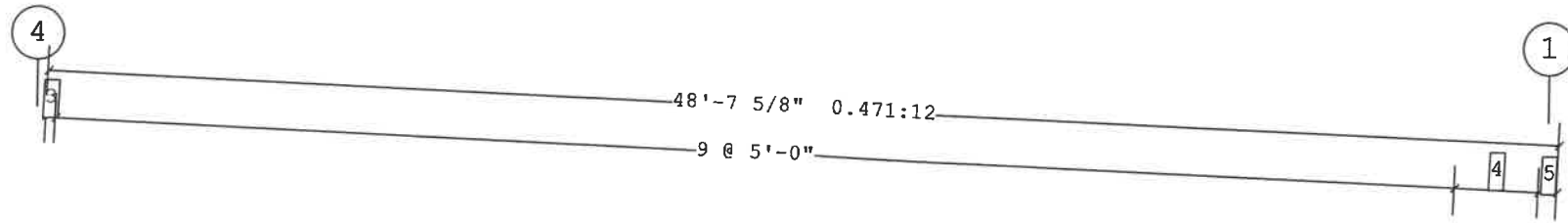
| Part | Mem. Width | Thick. | Webthk | Depth1 | Depth2 | Approx. Lgth |
|--------|------------|--------|---------|--------|--------|--------------|
| CX004 | 1 6" | .1875 | .1345 | 9" | 9" | 28'-6 15/16" |
| BGX002 | 2-5 5" | .1200 | 2@.1200 | 8 1/2" | 8 1/2" | 29'-11 5/8" |
| BGX003 | 6-7 5" | .0590 | 2@.0590 | 8 1/2" | 8 1/2" | 18'-7 1/8" |
| CGX002 | 8 5" | .0730 | 2@.0730 | 8 1/2" | 8 1/2" | 26'-8 1/2" |
| EPX001 | 9 7" | .1875 | .1345 | 9" | 9" | 27'-7 3/8" |

⊕ A325 Bolt Connection & Plate Schedule

| Id | Qty | Bolt Dia. | Bolt Length | Plate Thick. | Rows Out | Rows In | Tension Bolt | Washer |
|----|-----|-----------|-------------|--------------|----------|---------|--------------|--------|
| A | 4 | 1/2" | 1 1/2" | 3/8" | 1 | 1 | | |
| B | 4 | 3/4" | 2" | 3/8" | 1 | 1 | | |

Frame Clearances

Horiz. Clearance between members 1(CX004) and 8(CGX002): 46'-10 7/16"
 Vert. Clearance at member 1(CX004): 28'-6 9/16"
 Vert. Clearance at member 8(CGX002): 26'-8 1/2"
 Vert. Clearance at member 9(EPX001): 27'-7 1/4"
 Finished Floor Elevation = 100'-0" (Unless Noted Otherwise)

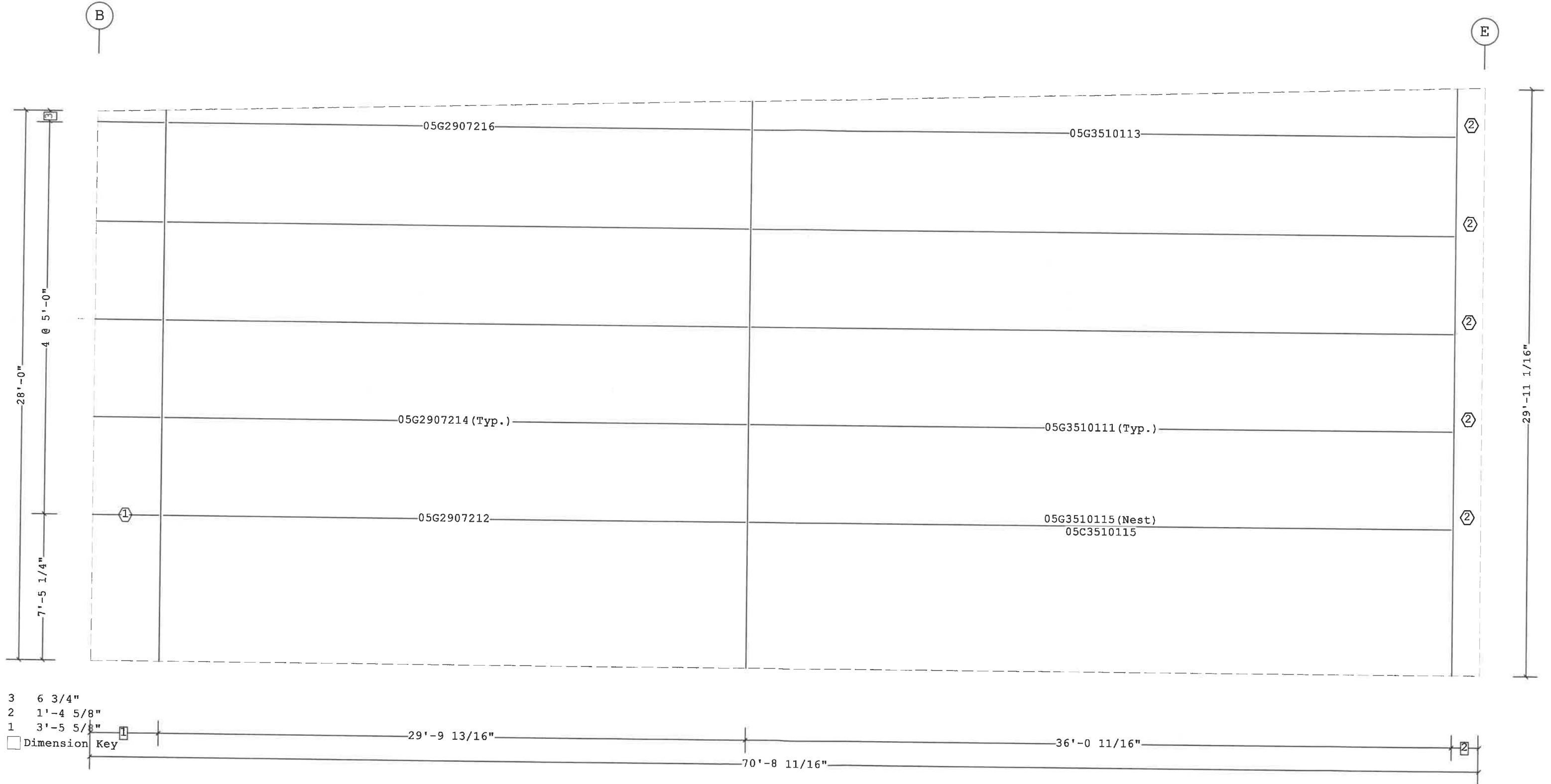


FRAME CROSS SECTION AT FRAME LINE(S) C

- 6 7 7/8"
- 5 7 1/4"
- 4 2'-8 5/8"
- 3 3 3/4"
- 2 2'-6 3/4"
- 1 1 5/8"

□ Dimension Key

- Part Mark Key
 1 05G0304117 (Typ.)
 2 GFA200

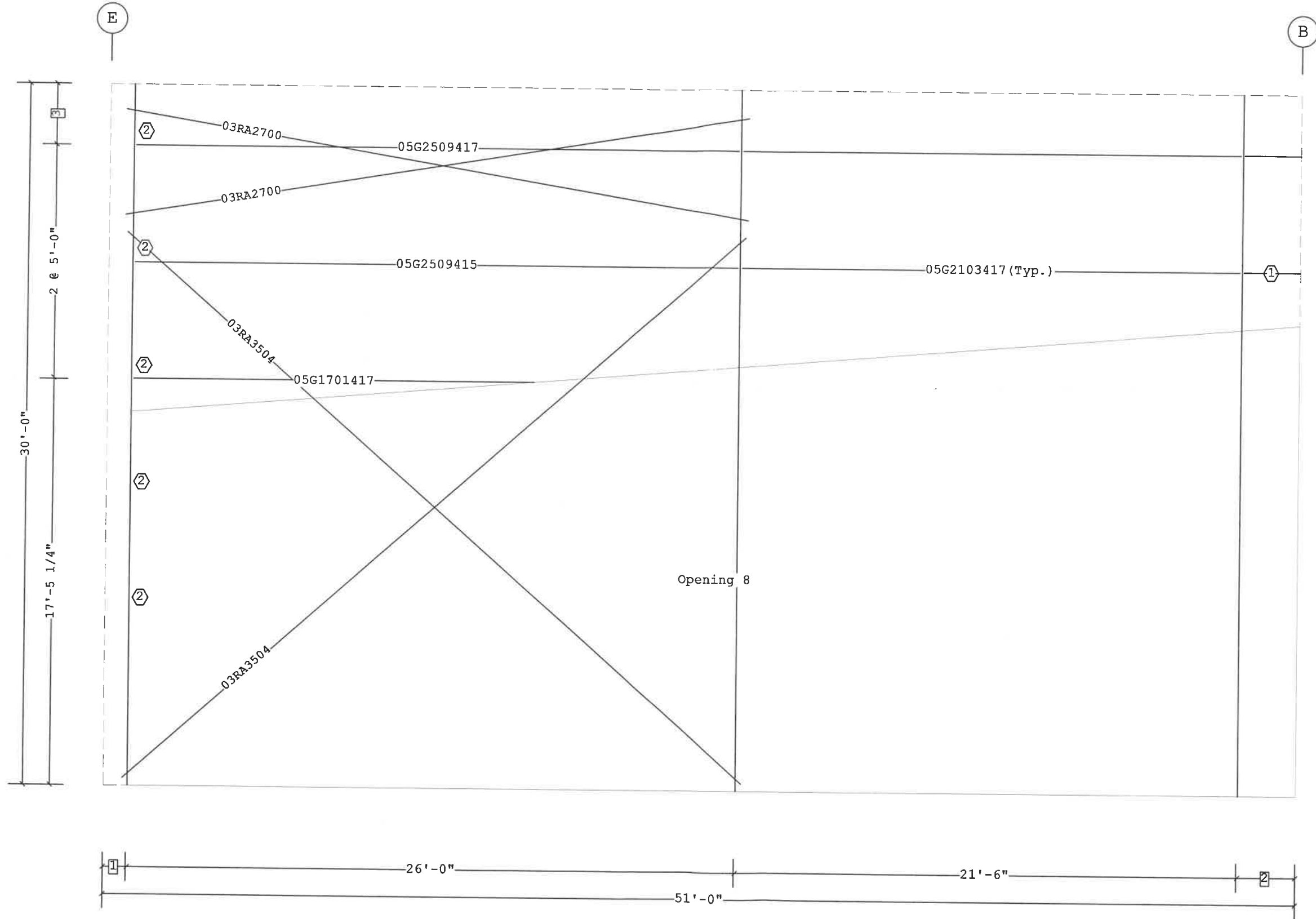


- 3 6 3/4"
 2 1'-4 5/8"
 1 3'-5 5/8"

Dimension Key

SECONDARY ELEVATION AT 1

- Part Mark Key
 1 05G0204417 (Typ.)
 2 GFA106



- 3 2'-6 3/4"
 2 2'-6"
 1 1'-0"
 □ Dimension Key

SECONDARY ELEVATION AT 4

Covering Schedule

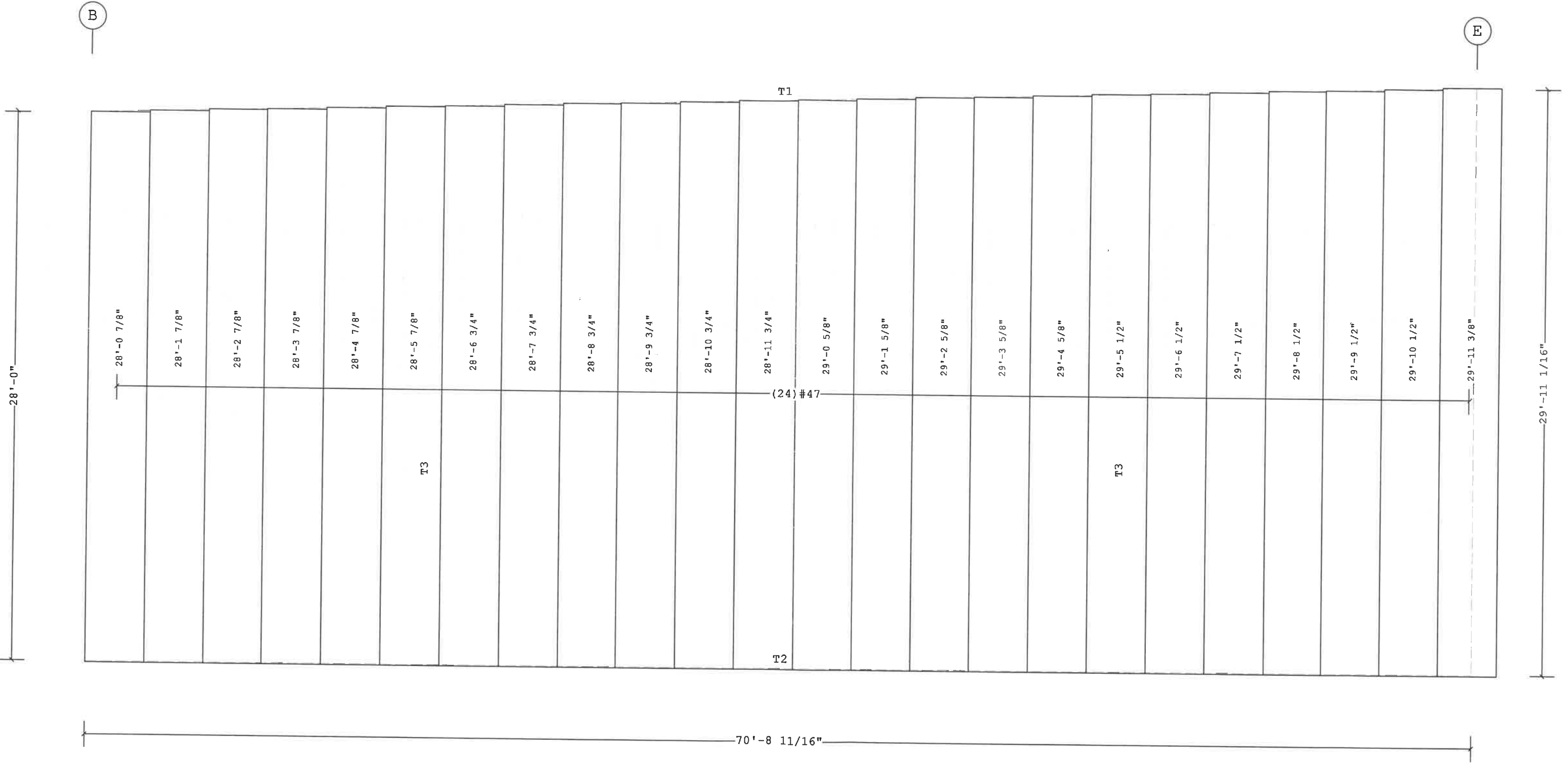
| Id | Qty | Type | Start | Length | Gage | OP | Fin. | Color | Increment | Direction |
|-----|-----|------|-------|--------|------|----|------|-------|-----------|---------------|
| #47 | 24 | PR | 28'-0 | 7/8" | 26 | 1 | K | TD | 1" | Left to Right |

Oper. Code:1=SQ,SQ
 Finish:K=KXL
 Color:TD=Standard Color

Trim Schedule

| Id | Parts |
|----|--|
| T1 | (3)EG201,EG121,(7)PCA10A,PCA05A,(25)STR2 |
| T2 | (3.5)BA1,(8)BT10 |
| T3 | DE1,DN1,(3)DS10,(6)DST1 |

| Color | Details |
|------------------|------------------------------------|
| Patrician Bronze | RC04B2,RC32B1,RC61B6,WC04A1,WC11A1 |
| Patrician Bronze | EN52A1,RC00A1,WC01A3,WC04A1 |
| Match Wall Color | RC38F1 |



COVERING ELEVATION AT 1

Covering Schedule

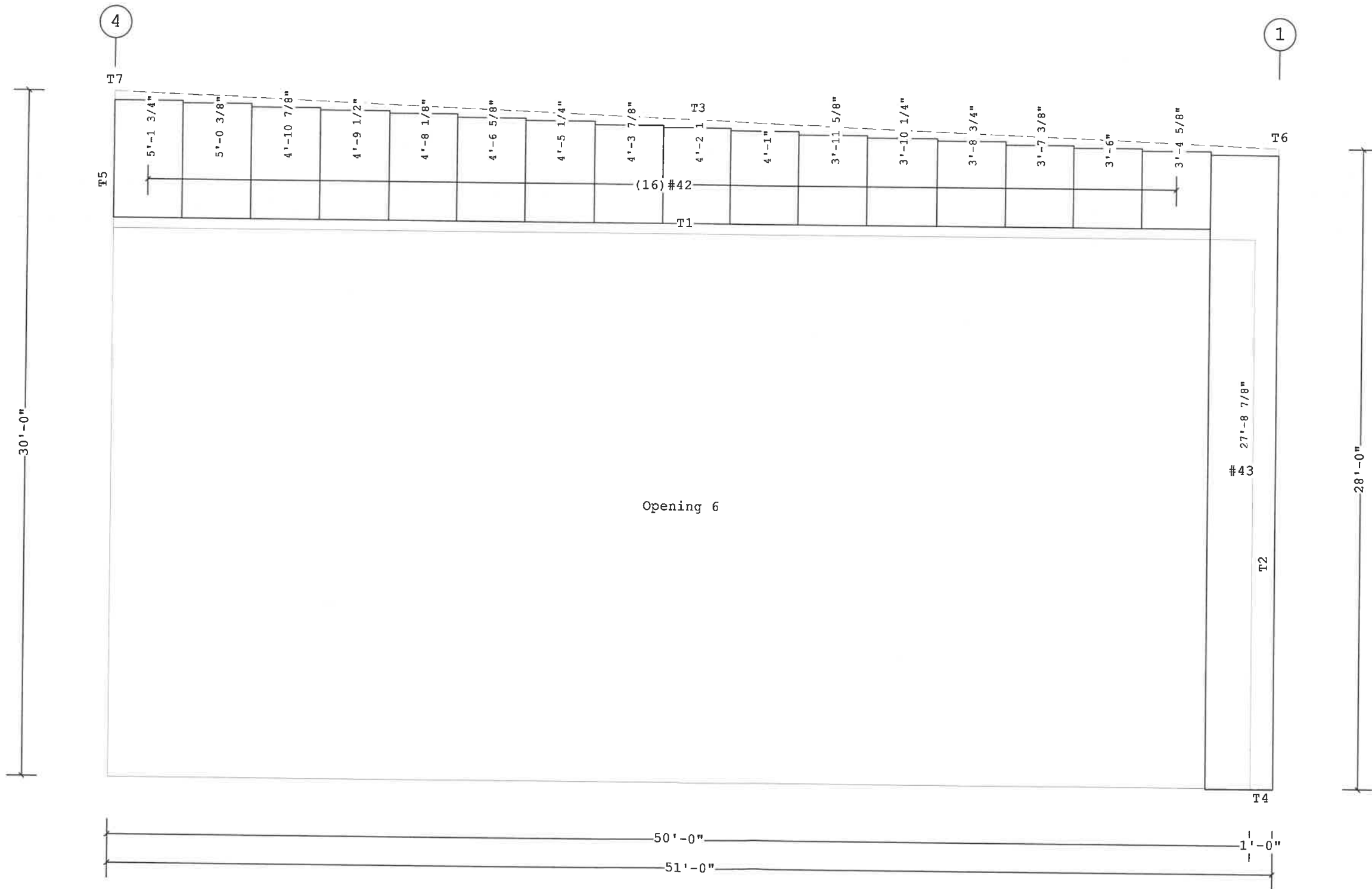
| Id | Qty | Type | Start Length | Gage | OP | Fin. | Color | Increment | Direction |
|-----|-----|------|--------------|------|----|------|-------|-----------|---------------|
| #42 | 16 | PR | 5'-1 3/4" | 26 | F | K | TD | 1 7/16" | Left to Right |
| #43 | 1 | PR | 27'-8 7/8" | 26 | 1 | K | TD | | Left to Right |

Oper. Code: F=CR, SQ
 Oper. Code: l=SQ, SQ
 Finish: K=KXL
 Color: TD=Standard Color

Trim Schedule

| Id | Parts |
|----|---------------------------------|
| T1 | (5)SMG110 |
| T2 | CT16,CT12 |
| T3 | (3)RCHB15,RCHB10,(2)RKF20,RKF16 |
| T4 | (0.1)BA1,BT10 |
| T5 | CT10 |
| T6 | BS1,GGC1,MCC1,PRF1 |
| T7 | MCC1 |

| Color | Details |
|------------------|------------------------------------|
| Not Applicable | RC00A2,RC43B2,RC44A1,RS43C1,WC40A2 |
| Match Wall Color | WC20A1 |
| Patrician Bronze | RC30B1 |
| Patrician Bronze | EN52A1,RC00A1,WC01A3,WC04A1 |
| Match Wall Color | WC20A1 |
| Patrician Bronze | RC38A1 |
| Patrician Bronze | RC38AJ |



COVERING ELEVATION AT B

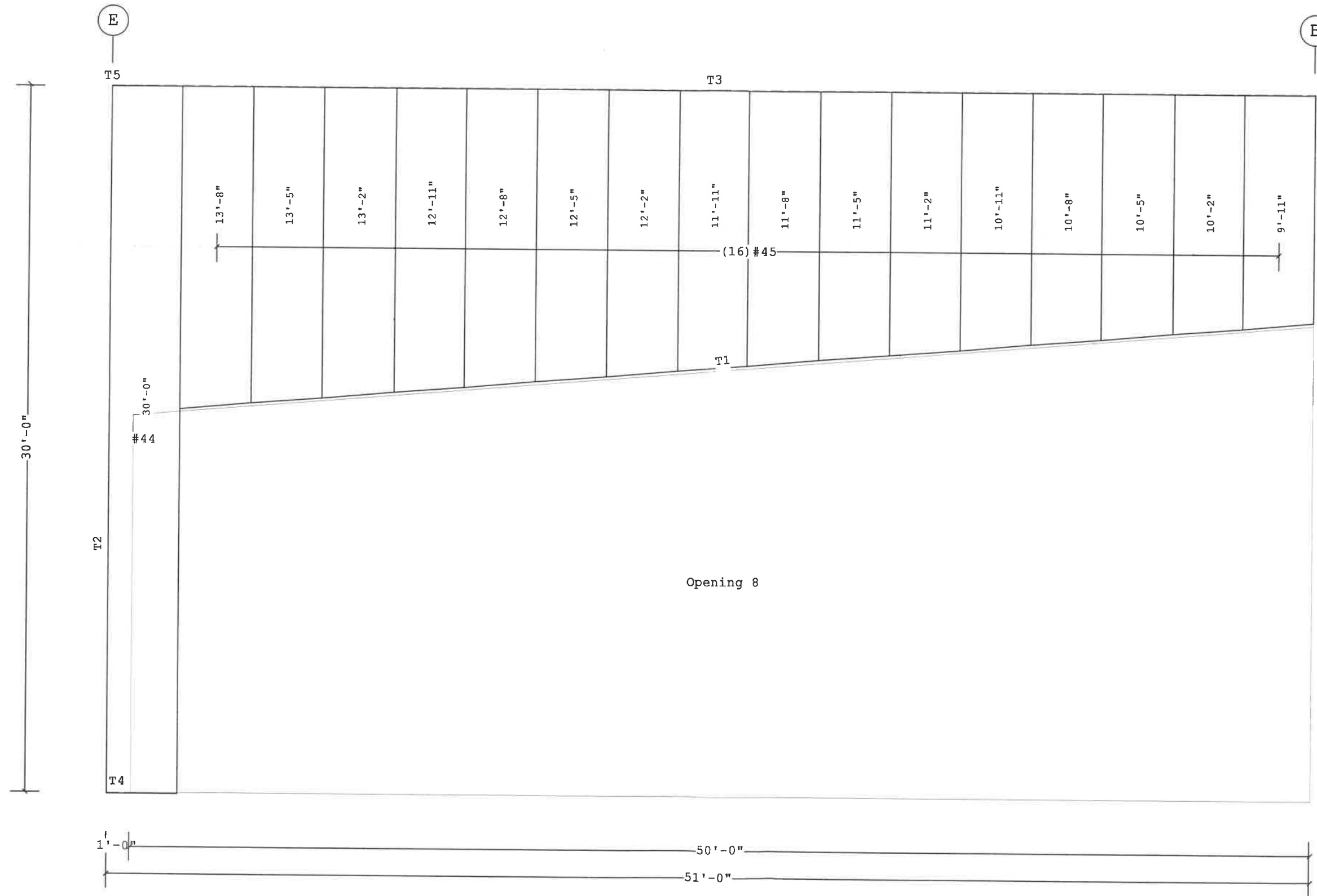
Covering Schedule

| Id | Qty | Type | Start Length | Gage | OP | Fin. | Color | Increment | Direction |
|-----|-----|------|--------------|------|----|------|-------|-----------|---------------|
| #44 | 1 | PR | 30'-0" | 26 | 1 | K | TD | | Left to Right |
| #45 | 16 | PR | 13'-8" | 26 | M | K | TD | 3" | Left to Right |

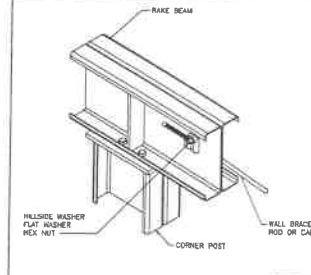
Oper. Code:l=SQ,SQ
 Oper. Code:M=LF,SQ
 Finish:K=KXL
 Color:TD=Standard Color

Trim Schedule

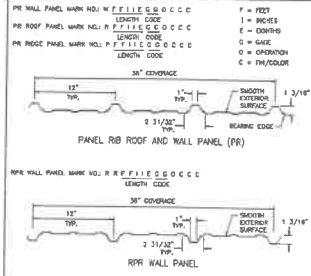
| Id | Parts | Color | Details |
|----|---|------------------|------------------------------------|
| T1 | (3)GAC1040, (5)NLTB10,NLTB05, (4)CLA2052L,1CLE3L, (32)CLA1072L,CLA1080L, (6)RCF10A, (3)TA10 | Match Roof Color | RC52B1,RC80A2,RC80A3,RC80C1,WC55D2 |
| T2 | CT20,CT10 | Match Wall Color | WC20A1 |
| T3 | (3)PKF16A,PKF05A | Patrician Bronze | EN52A1,RC00A1,RC35B1,WC13A1 |
| T4 | (0.1)BA1,BT10 | Patrician Bronze | EN52A1,RC00A1,WC01A3,WC04A1 |
| T5 | MCC1 | Patrician Bronze | RC38AJ |



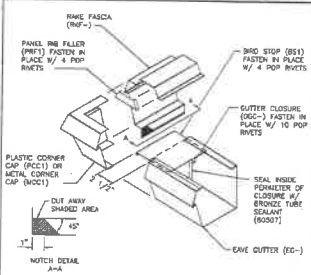
COVERING ELEVATION AT 4



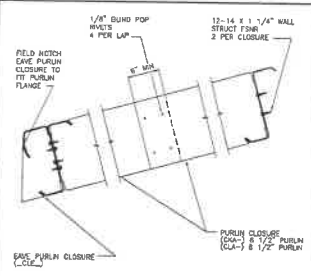
WALL ROD AT RAKE BEAM



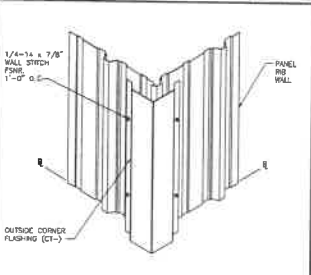
ROD CABLE BRACING AT COL. BASE



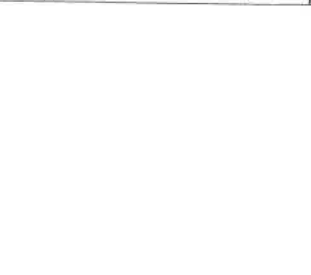
TYPICAL FLANGE BRACE CONNECTIONS



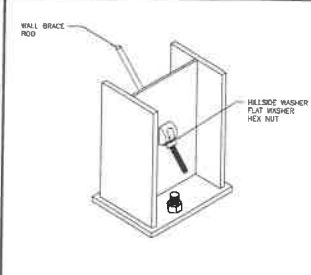
SAG ANGLES X-ING



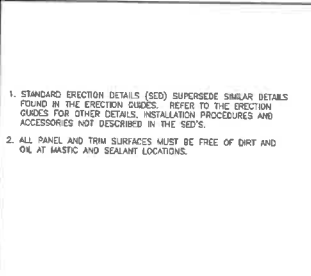
SUSPENDED LOADS



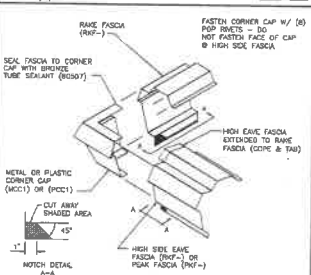
STANDARD SHM PROCEDURE



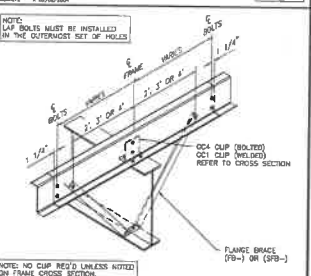
ROD BRACE ASSEMBLY DRAWING



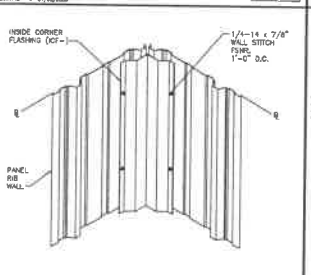
MARK NUMBER KEY



SECONDARY PUNCH PATTERNS



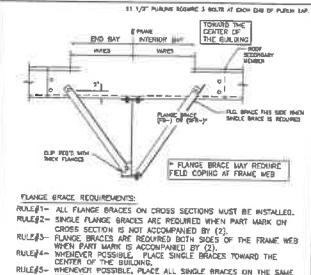
INTERIOR GUTTER NOTES



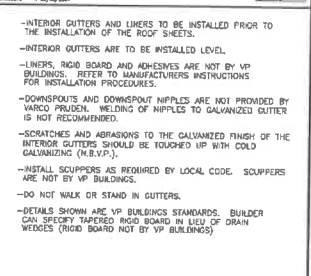
PANEL RIB ROOF



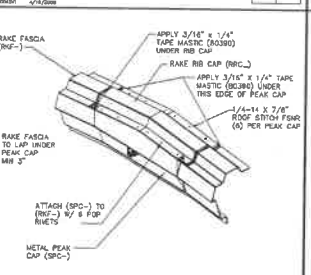
PANEL RIB ROOF



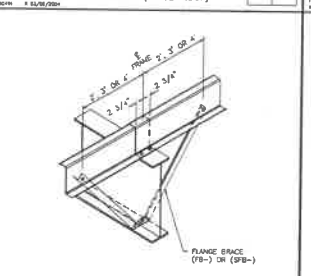
FASTENER PATTERNS



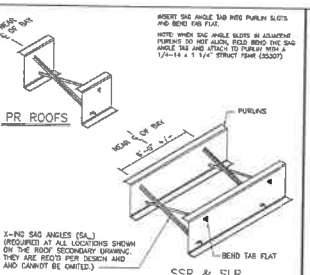
PANEL RIB ROOF RAKE TRIM



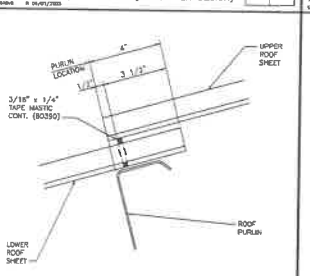
PANEL RIB W/ EAVE GUTTER



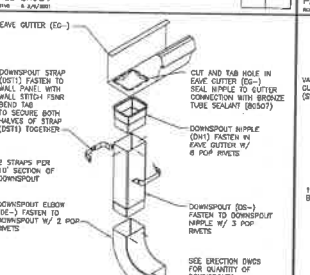
PANEL RIB HIGH EAVE TRIM



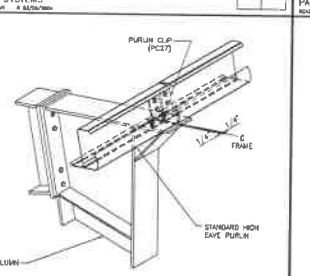
EAVE GUTTER CORNER ASSEMBLY



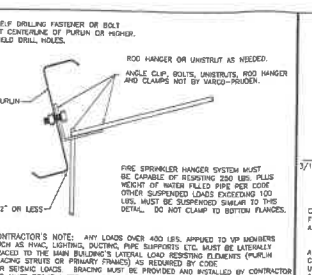
HIGH EAVE CORNER ASSEMBLY



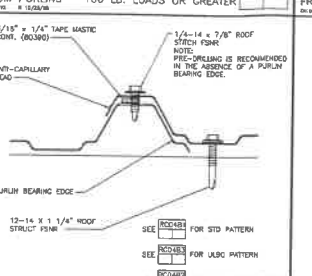
RAKE FASCIA



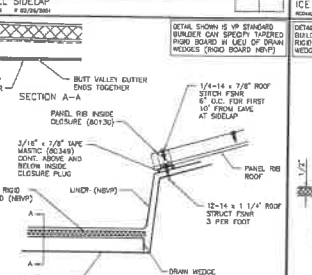
DOWNSPOUT ASSEMBLY



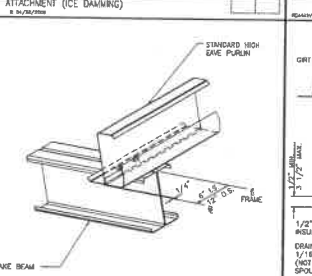
PANEL RIB INTERIOR GUTTER



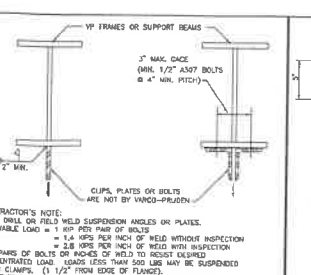
LINER PLACEMENT AT INT. GUTTERS



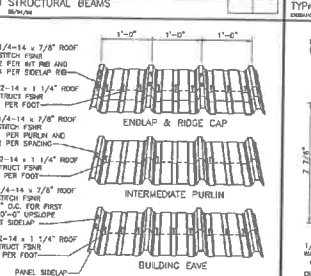
PANEL RIB ROOF HT CHANGE



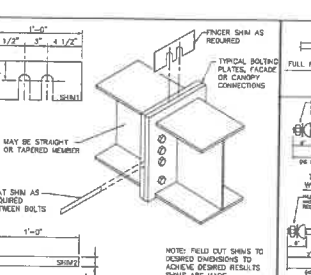
PR EAVE GUTTER EXPANSION JOINT



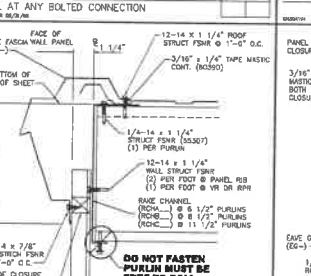
PURLIN CLOSURES



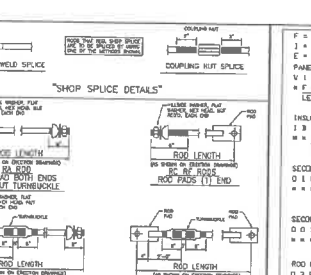
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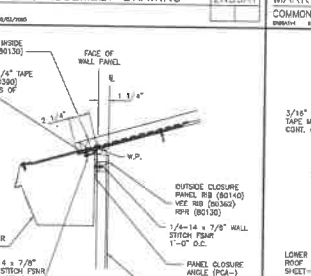
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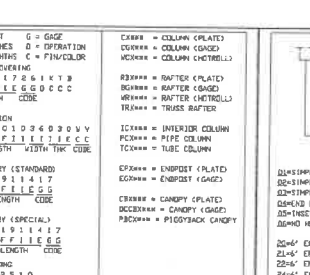
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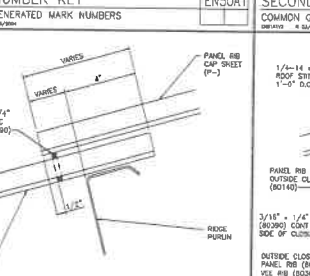
OUTSIDE CORNER TRIM



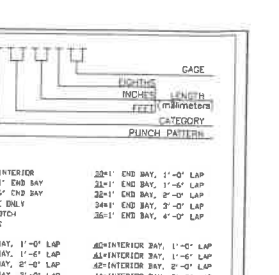
INSIDE CORNER FLASHING



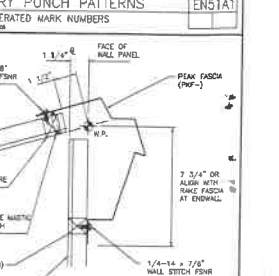
BASE OF WALL AT MULTI-GUTTER



BASE OF WALL AT MULTI-GUTTER



BASE OF WALL AT MULTI-GUTTER



BASE OF WALL AT MULTI-GUTTER

WALL ROD AT RAKE BEAM

ROD CABLE BRACING AT COL. BASE

TYPICAL FLANGE BRACE CONNECTIONS

SAG ANGLES X-ING

SUSPENDED LOADS

STANDARD SHM PROCEDURE

ROD BRACE ASSEMBLY DRAWING

MARK NUMBER KEY

SECONDARY PUNCH PATTERNS

INTERIOR GUTTER NOTES

PR ROOF & PR/RP WALL PANELS

NOTES

INTERIOR GUTTER NOTES

PANEL RIB ROOF

PANEL RIB ROOF

FASTENER PATTERNS

PANEL RIB ROOF RAKE TRIM

PANEL RIB W/ EAVE GUTTER

PANEL RIB ROOF

PANEL RIB HIGH EAVE TRIM

EAVE GUTTER CORNER ASSEMBLY

HIGH EAVE CORNER ASSEMBLY

RAKE FASCIA

DOWNSPOUT ASSEMBLY

PANEL RIB INTERIOR GUTTER

LINER PLACEMENT AT INT. GUTTERS

PANEL RIB ROOF HT CHANGE

PR EAVE GUTTER EXPANSION JOINT

PURLIN CLOSURES

PURLIN CLOSURES

PURLIN CLOSURES

PURLIN CLOSURES

PURLIN CLOSURES

PURLIN CLOSURES

PURLIN CLOSURES

PURLIN CLOSURES

PURLIN CLOSURES

PURLIN CLOSURES

PURLIN CLOSURES

PURLIN CLOSURES

OUTSIDE CORNER TRIM

INSIDE CORNER FLASHING

BASE OF WALL AT MULTI-GUTTER

BASE OF WALL AT MULTI-GUTTER

BASE OF WALL AT MULTI-GUTTER

BASE OF WALL AT MULTI-GUTTER

BASE OF WALL AT MULTI-GUTTER

BASE OF WALL AT MULTI-GUTTER

BASE OF WALL AT MULTI-GUTTER

BASE OF WALL AT MULTI-GUTTER

OUTSIDE CORNER TRIM

INSIDE CORNER FLASHING

BASE OF WALL AT MULTI-GUTTER

BASE OF WALL AT MULTI-GUTTER

BASE OF WALL AT MULTI-GUTTER

BASE OF WALL AT MULTI-GUTTER

BASE OF WALL AT MULTI-GUTTER

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