Weaver
CONSTRUCTION MANAGEMENT
3679 S Huron Street, Suite 404 Englewood, Colorado 80110
Phone: (303) 789-4111 FAX: (303) 789-4310

SUBMITTAL TRANSMITAL

July 23, 2012
Submittal No: 13121-005.A

PROJECT: **Harold Thompson Regional WRF**
Birdsall Rd.
Fountain, CO 80817
Job No. 2908

ENGINEER: **GMS, Inc.**
611 No. Weber St., #300
Colorado Springs, CO 80903
719-475-2935 Roger Sams

OWNER: **Lower Fountain Metropolitan Sewage Disposal District**
901 S. Santa Fe Ave.
Fountain, CO 80817
719-382-5303 James Heckman

CONTRACTOR: **Heath Steel**
141 Racquette Dr
Fort Collins, CO 80522
970-490-8031 Randy Gates
rgates@heathsteel.com

SUBJECT: Revisions to Operations Building Anchor Rod Plans – Made on 7/19/12 – Anchor Bolt Pages A-1 & A-2 Have Been Revised

SPEC SECTION: 13121

PREVIOUS SUBMISSION DATES:

DEVIATIONS FROM SPEC: ___ YES _X_ NO

CONTRACTOR'S STAMP: This submittal has been reviewed by Weaver Construction Management and, unless indicated otherwise, has been found to be in conformance with the intent of the contract documents.

Contractor's Stamp:	Engineer's Stamp:
Date: 7/23/12 Reviewed by: John Jacob (X) Reviewed Without Comments ( ) Reviewed With Comments	

ENGINEER'S COMMENTS:_____
_____

CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. Box 2078
3942 W. Old Highway 30
Grand Island, NE 68802-2078
Phone (308) 389-7200 FAX (308) 389-7370

7/19/2012

Heath Steel
141 Racquette Drive
PO Drawer H
Fort Collins, CO 80522
Attn: Randy Gates

Re: B3004915 / Weaver Construction Management/Lower Fountain Metro Sewage

For Construction

Drawings or items included are as follows:

No. of Sets	Revision No.	Latest Revision Date	Description
3	1	07.19.2012	Complete Sets of Anchor Rod Plans

ANCHOR BOLT PAGES A1 & A2 HAVE BEEN REVISED.

For questions concerning this mailing, contact:

Shawn Springer
P.O. Box 2078
3942 W. Old Highway 30
Grand Island, NE 68802-2078
Phone: (308) 385-4632
E-mail: shawn.springer@chiefind.com

CHIEF®

Transmittal Sheet Information

Date: 7-19-12 Name: Robert H

ESR Number:

Job Number: B3004915 Customer: Weaver Const. Management

Builder: Heath Steel State: CO

Revision No. (Give Revision Number): 1 Revision Date: 7-19-12 Pages Revised: A1, A2

(Anchor Bolt Plan) Building Drawings

No. sets to go out: 2 (Print room add additional sets as required)

GI/30 RN/31

Delivery Address for Drawings (must always be provided) No P.O. Box on UPS or FedEx Addresses please	Special Mail Instructions / Comments
141 Racquette Drive	
Fort Collins, CO 80522	
Attention Name : Randy Gates (must be provided)	

Please circle your selections

Project Manager

Baldwin
Clingenpeel
Lautenschlager
(Martinez)
Pikop
Springer
Tasich
Zabka
Van Horn

Job Type

(Construction)
Permit
Approval
Progress
Letter of Certification
Design Calculations

Qty

Job Requirements (For Construction Only)

Special Trim
Special Plates
Special Angle
Made in U.S.A.
UL Letter 4
LTC Roof
STC Roof
MSC Roof
MVF/MVP Roof
No Frames
No Fabs
Wisconsin
Lincoln
Shipping Papers
Frame Fabs
IAS Header Sheet Only

Qty

Shipping Information

Fed Ex _____ *Fed Ex # to Charge*

U.S. Mail _____

UPS _____ *Fax Number*

_____ *UPS Confirmation e-mail address*

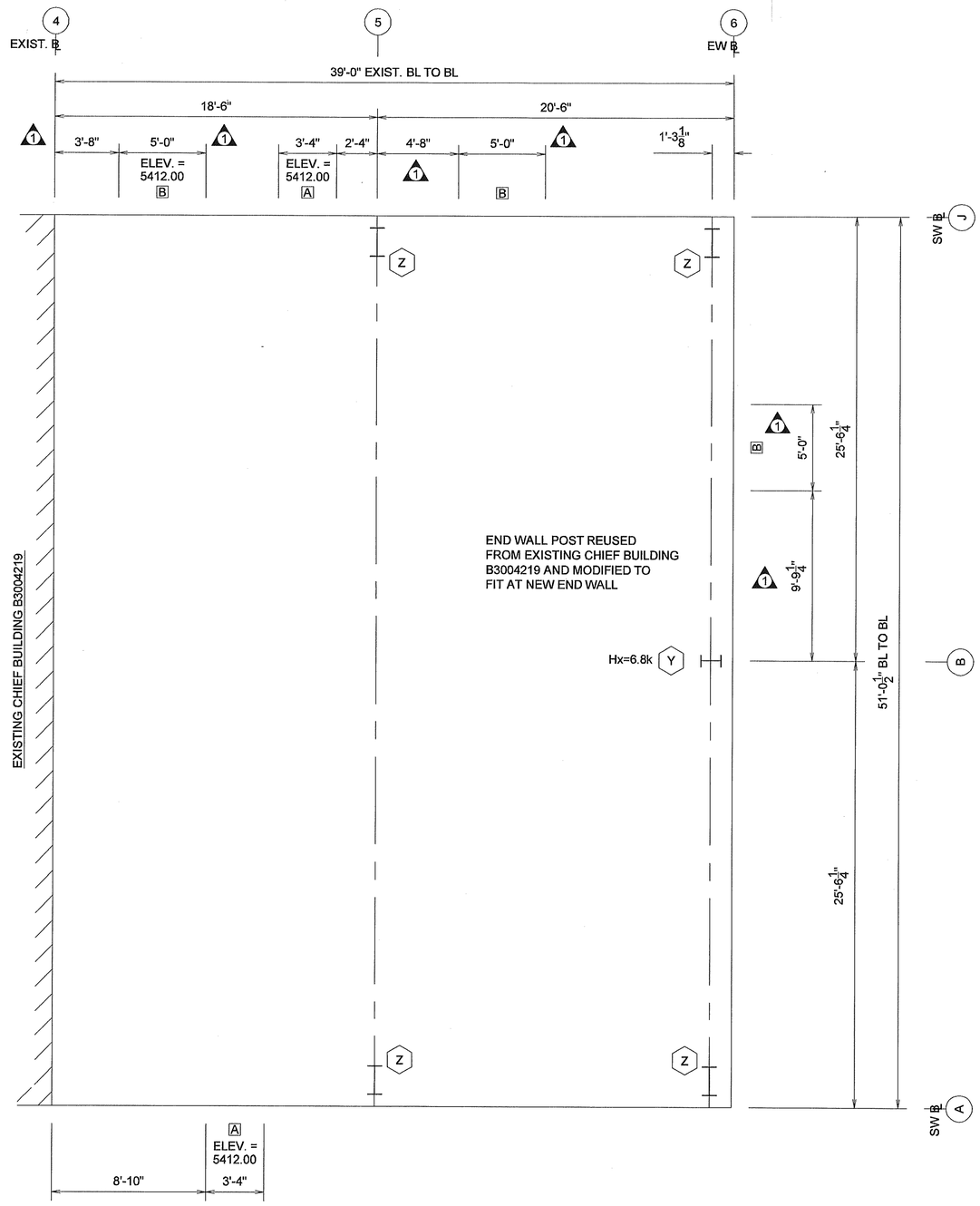
Final Design Drawings

Colorado Springs Submittal
(For Permit Use Only)

City of Denver Submittal
(For Structural Plan Review)

Kansas City, MO Submittal
(must include (1) ICBO certificate and (1) AISC certificate)

ACCESSORY SCHEDULE		
MARK	QUAN	DESCRIPTION
A	2	3'-4" X 7'-4" WALK DOOR F.O.
B	3	5'-0" X 3'-0" WINDOW F.O.
C	2	5'-0" X 0'-8" WINDOW F.O.



ANCHOR ROD PLAN

FINISHED FLOOR ELEVATION = 5411.00
BASE OF ALL COLUMNS AT ELEVATION = 5413.00
BASE OF FRAME OPENING JAMBS AT ELEVATION = 5413.00 UNLESS NOTED

REFERENCE NOTES:

1. ALL ANCHOR RODS INCLUDING NUTS AND WASHERS FOR SAME ARE NOT FURNISHED BY CHIEF BUILDINGS.
2. ANCHOR ROD MATERIAL SHALL CONFORM TO ASTM F1554 HAVING A YIELD OF 36 KSI OR GREATER.
3. ROD PROJECTIONS ARE RECOMMENDED MINIMUMS BASED ON THE BASE PLATE BEARING DIRECTLY ON THE CONCRETE PIER. IF THE BASE PLATE IS TO BEAR ON GROUT, THE ROD PROJECTION MUST BE INCREASED ACCORDINGLY.
4. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 3000 PSI.
5. ALL DRAWINGS ARE NOT TO SCALE.

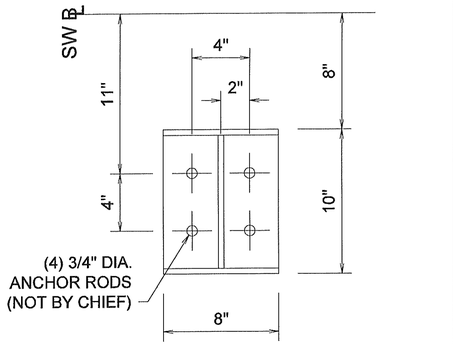
ANCHOR RODS (BY OTHERS)		
QUAN	SIZE	PROJ
20	0-½" Ø	1½"
20	0-¾" Ø	2"

REVISIONS		
4		
3		
2		
1	REVISED PER CHANGE ORDER #3	RFH 07-19-12

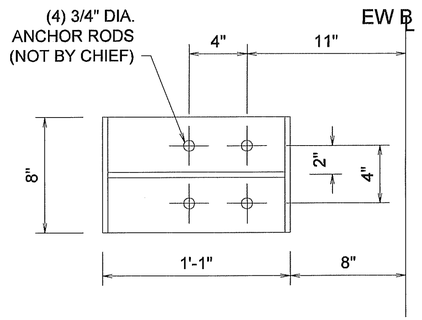
ANCHOR ROD DRAWINGS
HEATH STEEL / WEAVER CONST. MANAGEMENT
FOUNTAIN, CO
RF 51'-0 1/2"X39'X19'-4" BAYS VARY 3:12

CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. BOX 2078
GRAND ISLAND, NE
68802-2078

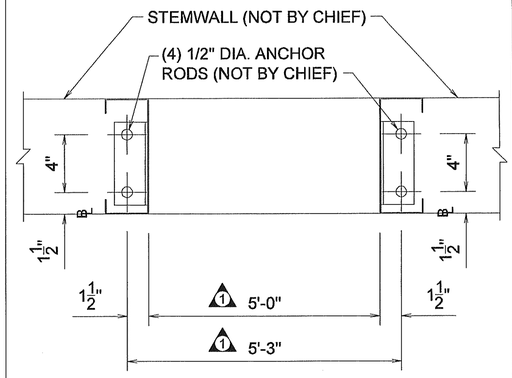
DRAWN	CHECK	ORDER NO.	
RFH	RS	B3004915	A1 / A4
06-08-12	06-08-12		



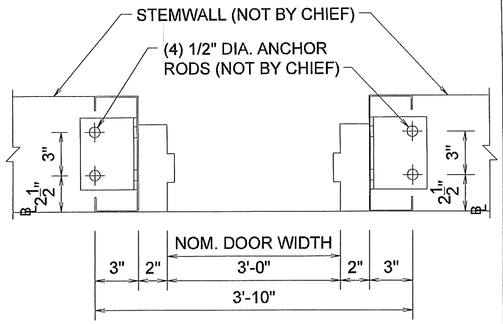
DETAIL Z



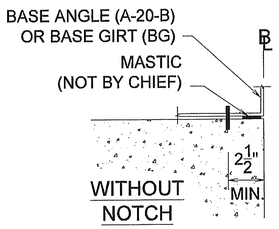
DETAIL Y

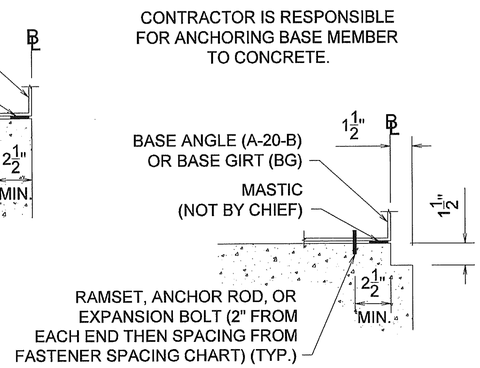


WINDOW ANCHOR ROD DETAIL

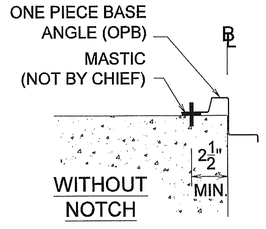


WALK DOOR ANCHOR ROD DETAIL





WITH NOTCH

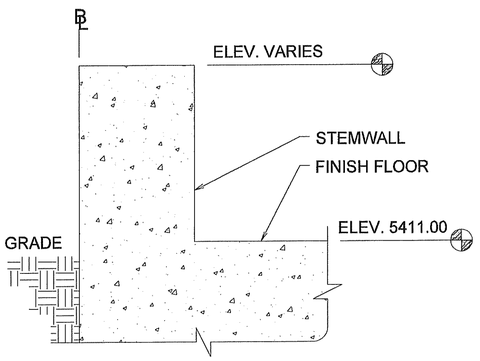


BASE MEMBER DETAILS

BASE ANCHORAGE SPACING FOR STANDARD BASE ANGLE, BASE GIRT OR ONE PIECE BASE WITH CS OR AP WALLS		
FASTENER TYPE & DIAMETER	MINIMUM EMBEDMENT	MAXIMUM SPACING
1/4" WEDGE ANCHOR ①	1 1/4"	3'-0"
1/4" SCREW TYPE ANCHOR ②	1 1/2"	3'-0"
3/8" CAST-IN ANCHOR	4" WITH HOOK OR HEAD	3'-0"
1/4" HAMMER-IN ③	1 3/8"	2'-0"
0.14" POWDER ACTUATED ④	1 1/4"	1'-6"

① HILTI KWIK BOLT®, RAMSET TRUBOLT®, POWERS POWERSTUD®, OR EQUAL
② CFS TAPCON®, HILTI KWIK-CON II®, POWERS WEDGE-BOLT®, OR EQUAL
③ POWERS ZAMAC HAMMER SCREW®, HILTI METAL HIT ANCHOR®, OR EQUAL
④ POWERS BALLISTIC POINT PIN, RAMSET 1500/1600 SERIES, HILTI UNIVERSAL NAIL OR EQUAL

FASTENER SPACING CHART



STEMWALL DETAIL

NOTE: MASONRY WALL IS NOT DETAILED.

THE FLOOR ELEVATION IS 5411.00.

THE TOP OF MASONRY ELEVATION IS VARIES.

UNLESS OTHERWISE NOTED, THE BASE OF MAIN FRAME COLUMNS AND ALL OTHER FRAMING IS ASSUMED TO BE TOP OF STEMWALL ELEVATION.

CONTRACTOR NOTE:

CONCRETE LEDGE FOR MASONRY IS NOT SHOWN. CONTRACTOR IS TO DETERMINE CONCRETE LEDGE DIMENSIONS AT AREAS WITH MASONRY AND ALL OUT TO OUT OF CONCRETE DIMENSIONS.

1. CHIEF BUILDINGS IS NOT RESPONSIBLE FOR CONCRETE AND/OR MASONRY DESIGN, DIMENSIONS & REINFORCING STEEL DETAILS. CHIEF BUILDINGS RECOMMENDS THE CONTRACTOR/BUILDER TO OBTAIN THE SERVICES OF A QUALIFIED DESIGN ENGINEER FOR DESIGNS & DRAWINGS OF MASONRY OR CONCRETE WALL, FLOORS, & FOUNDATIONS TO WITHSTAND THE COLUMN REACTIONS INDICATED ON THE A.B. PLAN. CONCRETE OR MASONRY WALLS SHALL ALSO BE DESIGNED TO WITHSTAND WIND/SEISMIC LOAD ON THE WALL & BASE OF BLDG. WALL PANEL.

2. WHEN ENDWALL POST & CORNER POST REACTIONS ARE NOT INDICATED, THE CONTRACTOR/BUILDER &/OR CONCRETE DESIGN ENGINEER SHALL DETERMINE THE REACTIONS FROM THE SPECIFIED LIVE LOADS, WIND/SEISMIC LOAD, AND ANY APPLICABLE AUXILIARY LOADS.

3. CONCRETE AND/OR MASONRY ELEV. INDICATED ARE PER THE AGREEMENT TO PURCHASE/CUSTOMER DRAWINGS RECEIVED FROM THE CONTRACTOR/BUILDER.

REFERENCE NOTES

1. ACTUAL BASE PLATE DIMENSIONS MAY BE SMALLER THAN BASE PLATE DIMENSIONS SHOWN.

REVISIONS

4		
3		
2		
1	REVISED PER CHANGE ORDER #3	RFH 07-19-12

ANCHOR ROD DRAWINGS

HEATH STEEL / WEAVER CONST. MANAGEMENT

FOUNTAIN, CO

RF 51'-0 1/2"X39'X19'-4" BAYS VARY 3:12

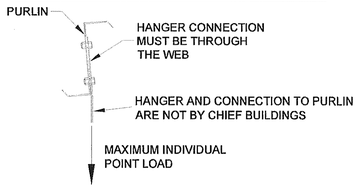
CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. BOX 2078
GRAND ISLAND, NE
68802-2078

DRAWN	CHECK	ORDER NO.	
RFH	RS	B3004915	A2 / A4
06-08-12	06-08-12		

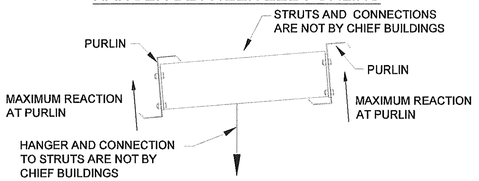
This structure has been designed for a collateral load of 3 psf. The total applied loads due to ceiling panels, ducts, sprinkler distribution lines, electrical equipment, conduit, fireproofing, other piping and mechanical loads, etc., cannot exceed this collateral load. In no case shall the total uniform collateral load on an individual roof member exceed the product of 3 psf times the spacing of the supporting member. Nor shall any individual point load or summation of point loads on any one roof member exceed the product of 3 psf times the member spacing times half the member length. In addition, no individual point load on a purlin can exceed 87 lbs. All loads suspended from purlins shall have the load introduced through the web and not the flange of the purlin. Hangers cannot be supported from the edge of flanges or through holes in the flanges of the purlins. Design of hangers and their attachments are not by Chief Buildings. Chief Buildings is NOT responsible for lateral or longitudinal bracing of suspended members subjected to horizontal service, seismic, or wind loading.

Chief Buildings neither assumes nor accepts any responsibility for the design of hangers, bracing of suspended members, transverse support members, nor connections to roof purlins. It is the responsibility of the Buyer/Contractor and/or End Owner to have this design performed by a registered design professional.

HANGER AT INDIVIDUAL ZEE PURLIN



HANGER BETWEEN ZEE PURLINS



Building Design Criteria
B3004915

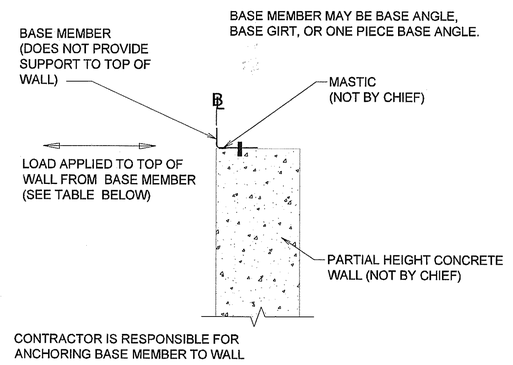
Building Code	Pikes Peak Regional Building Code 2011
2006 MBMA Occupancy Category	Substantial Hazard
Roof Live Load	20 psf
	(Tributary Area Reduction Not Allowed)
Collateral Load	3 psf
Ground Snow Load (Pg)	30 psf
Exposure Factor (Ce)	1.0
Thermal Factor (Ct)	1.0
Importance Factor (I)	1.1
Flat Roof Snow Load (Pf)	23.10 psf
Minimum Roof Snow Load	30.00 psf
Building Enclosure	Enclosed
Wind Speed	100 mph (GCpi ± 0.18)
Exposure Category	C
Importance Factor (I)	1.15
Wind Pressure (q)	23.52 psf
Seismic	
Spectral Response Short Periods (Ss)	18.5%
Spectral Response 1 s Period (S1)	5.9%
Seismic Importance Factor	1.25
Design Category	B
Site Class	D
Seismic Resisting System	
Longitudinal Direction	Steel System (R=3.0)
Lateral Direction	Steel System (R=3.0)
Seismic Response Coefficient (Cs)	0.082
Spectral Response Parameter Short Period (SDS)	0.197
Spectral Response Parameter 1 s Period (SD1)	0.094
Analysis Procedure	ELF
Base Shear	2112 lbs.
Other Loads:	None

The structure provided by Chief Buildings has been designed to have a partial height wall constructed of concrete, which is not by Chief Buildings. The base member at the top of the wall has NOT been designed to provide lateral support to the top of the wall. Chief Buildings neither assumes nor accepts any responsibility for design of this partial height concrete wall nor attachment or interface of this wall with the structure provided by Chief Buildings.

It is the responsibility of the Buyer/Contractor and/or End Owner to retain the services of a registered design professional who is responsible for the design of:

1.) The concrete wall and required reinforcing for code prescribed vertical and lateral loads (including the load imposed through the base member from the wall panel above) and sufficient ductility to allow for differential movement of the concrete wall and the structure provided by Chief Buildings.
2.) Attachment of the base member provided by Chief Buildings to the concrete wall.
3.) Detailing at base of the wall and at isolation joints at perpendicular walls to allow for differential movement of the concrete wall and the structure provided by Chief Buildings.

Lateral deflection and drift limits for the structure provided by Chief Buildings have been held to the limits ordered in the Agreement to Purchase. It is the responsibility of the registered design professional to insure design of the partial height concrete wall is compatible with these serviceability limits.



PARTIAL HEIGHT CONCRETE WALL DETAIL
BASE MEMBER ON TOP

Load Source	Load Applied to Top of Wall (in or out)
Wind Load (50-year recurrence)	100 plf

Attachments must be designed to safely transfer the forces shown from the base member into the top of the wall. The wall must be designed to resist loads applied to the wall area and the loads from the base member to the wall using load combinations and overstrength detailing requirements as required by the applicable building code.

Mezzanine loading information:

The building provided by Chief Buildings does not include structural support for the mezzanine, which is furnished by others.

Chief Buildings neither assumes nor accepts any responsibility for the design of the mezzanine. The mezzanine must be designed to resist all vertical and lateral loads without relying on the building provided by Chief Buildings for any support. It is the responsibility of the Buyer/Contractor and/or End Owner to have the mezzanine design performed by a registered design professional.

The frame at line 6 is an expandable full load frame. The frame has been designed for a future expansion of 23'-0" centerline-to-centerline of the future frame.

Where the frame cross section requires flange braces both sides of the column or rafter, these flange braces must be installed upon future expansion.

REFERENCE NOTES

1. ACTUAL BASE PLATE DIMENSIONS MAY BE SMALLER THAN BASE PLATE DIMENSIONS SHOWN.

REVISIONS

4 ———
3 ———
2 ———
1 ———

NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

ANCHOR ROD DRAWINGS
HEATH STEEL / WEAVER CONST. MANAGEMENT
FOUNTAIN, CO
RF 51'-0 1/2"X39'X19'-4" BAYS VARY 3:12

CHIEF BUILDINGS
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P.O. BOX 2078
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DRAWN	CHECK	ORDER NO.	A3
RFH	RS	B3004915	A4
06-08-12	06-08-12		

The 16" wide 20 ga Stucco Wall Panels with sealant, not provided by Chief Buildings, must provide structural support to all secondary framing. These panels must have a positive attachment to Chief Buildings' secondary framing capable of resisting roll forces, sag loads, lateral buckling, etc. in accordance with AISI specifications.

The wall panels not provided by Chief Buildings and their anchorage to the secondary framing must be capable of resisting all loads required by the specified building code and listed below.

Wall Panel Pressure (Interior Zone) = 27.8 psf
Wall Panel Suction (Interior Zone) = 30.1 psf
Wall Panel Suction (Corner Zone) = 37.2 psf
(Corner Zone Width =5.1 ft.)

The wall panels must meet the minimum properties and connections given below, which will be considered adequate to provide support to the secondary framing.

Minimum Wall Panel Properties: Ixx = 0.0368 in4/ft
Sxx = 0.0447 in3/ft

Minimum Connection Requirements:
(1) #12 structural fastener to secondary at 1'-4" o.c.

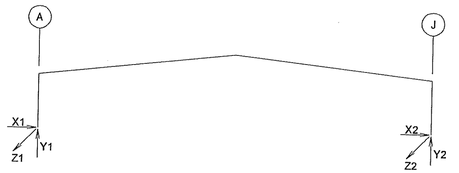
Chief Buildings neither assumes nor accepts any responsibility for the design of the wall panels and their anchorage nor coordination of compatibility between products provided by Chief Buildings and the wall panels not provided by Chief Buildings. It is the responsibility of the Buyer/Contractor and/or End Owner to have this design performed by a registered design professional.

The 24 ga Metal Sales Seam-Loc roof panels are not provided by Chief Buildings. Chief Buildings will supply secondary framing in the roof capable of resisting roll forces, sag loads and lateral buckling.

The roof panels not provided by Chief Buildings and their anchorage to the secondary framing must be capable of resisting all loads required by the specified building code and listed below.

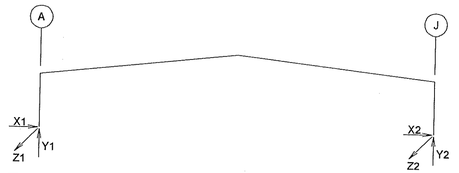
Roof Live Load = 20 psf
Roof Snow Load = 38.17 psf
Roof Panel Suction (Interior Zone) = 25.40 psf
Roof Panel Suction (Edge Zone) = 44.22 psf
Roof Panel Suction (Corner Zone) = 65.39 psf
(Edge/Corner Zone Width = 5.1 ft.)

Chief Buildings neither assumes nor accepts any responsibility for the design of the roof panels and their anchorage nor coordination of compatibility between products provided by Chief Buildings and the roof panels not provided by Chief Buildings. It is the responsibility of the Buyer/Contractor and/or End Owner to have this design performed by a registered design professional.



LOAD TYPE	X1	Y1	Z1	X2	Y2	Z2
DL - DEAD LOAD	0.9	2.5	-	-0.9	2.5	-
COL- COLLATERAL	0.8	1.8	-	-0.8	1.8	-
LL - LIVE LOAD	5.3	12.0	-	-5.3	12.0	-
SL - SNOW LOAD	7.9	18.1	-	-7.9	18.1	-
WLL- WIND FROM LEFT	-7.1	-12.2	-	1.3	-9.0	-
WLR- WIND FROM RIGHT	-1.3	-9.0	-	7.1	-12.2	-
WL2- WIND LT CASE 2	-6.4	-7.1	-	0.6	-3.9	-
WR2- WIND RT CASE 2	-0.6	-3.9	-	6.4	-7.1	-
WLE- WIND ON ENDWALL	-2.7	-14.0	-	3.3	-12.8	-
WE2- EW WIND CASE 2	-3.3	-12.8	-	2.7	-14.0	-
SL4- SNOW LOAD	5.0	7.8	-	-5.0	13.4	-
SL3- SNOW LOAD	5.0	13.4	-	-5.0	7.8	-
SEI- SEISMIC LOAD	-0.4	-0.3	-	-0.4	0.3	-
SB1- SEISMIC BRACING	-	-0.7	±0.8	-	-0.7	±0.8
SB2- SEISMIC BRACING	-	0.7	-	-	0.7	-
BR1- WIND BRACING 1	-	-4.6	±5.1	-	-4.6	±5.1
BR2- WIND BRACING 2	0.1	4.6	-	-0.1	4.6	-
MAXIMUM POSITIVE	9.9	22.5	±5.1	6.6	22.5	±5.1
MAXIMUM NEGATIVE	-6.6	-17.1	±5.1	-9.9	-17.1	±5.1

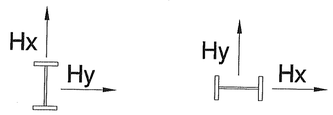
B3004915A01 REACTIONS USED AT LINE(S): 5



LOAD TYPE	X1	Y1	Z1	X2	Y2	Z2
DL - DEAD LOAD	0.9	2.4	-	-0.9	2.4	-
COL- COLLATERAL	0.7	1.7	-	-0.7	1.7	-
LL - LIVE LOAD	4.9	11.1	-	-4.9	11.1	-
SL - SNOW LOAD	7.3	16.7	-	-7.3	16.7	-
WLL- WIND FROM LEFT	-7.2	-11.5	-	0.3	-8.0	-
WLR- WIND FROM RIGHT	-0.3	-8.0	-	7.2	-11.5	-
WL2- WIND LT CASE 2	-6.9	-6.8	-	-	-3.3	-
WR2- WIND RT CASE 2	-	-3.3	-	6.9	-6.8	-
WLE- WIND ON ENDWALL	-1.9	-12.9	-	2.4	-11.8	-
WE2- EW WIND CASE 2	-2.4	-11.8	-	1.9	-12.9	-
SL4- SNOW LOAD	4.6	7.2	-	-4.6	12.3	-
SL3- SNOW LOAD	4.6	12.3	-	-4.6	7.2	-
SEI- SEISMIC LOAD	-0.4	-0.3	-	-0.4	0.3	-
SB1- SEISMIC BRACING	-	-0.7	±0.8	-	-0.7	±0.8
SB2- SEISMIC BRACING	-	0.7	-	-	0.7	-
BR1- WIND BRACING 1	-	-4.6	±5.1	-	-4.6	±5.1
BR2- WIND BRACING 2	0.1	4.6	-	-0.1	4.6	-
MAXIMUM POSITIVE	9.1	20.8	±5.1	6.7	20.8	±5.1
MAXIMUM NEGATIVE	-6.7	-16.1	±5.1	-9.1	-16.1	±5.1

B3004915A02 REACTIONS USED AT LINE(S): 6

ORIENTATION OF HORIZONTAL REACTIONS:



Hx IS PARALLEL TO THE COLUMN WEB AND
Hy IS PERPENDICULAR TO THE COLUMN WEB,
FOR ALL ENDWALL COLUMNS & SOLDIER COLUMNS
BY CHIEF BUILDINGS.

1. COLUMN FOOTINGS AND PIERS MUST BE DESIGNED TO WITHSTAND HORIZONTAL AND VERTICAL REACTIONS AS SHOWN ON THE ANCHOR ROD PLAN. CHIEF BUILDINGS IS NOT RESPONSIBLE FOR DESIGN OF CONCRETE FOUNDATION. CHIEF BUILDINGS RECOMMENDS THAT THE SERVICES OF A QUALIFIED ENGINEER IS OBTAINED BY THE CONTRACTOR / BUILDER TO DESIGN THE FOUNDATIONS FOR THE INDICATED REACTIONS.

2. REACTIONS ARE GIVEN IN KIPS. (1 KIP = 1000 LBS.) MOMENTS, IF ANY, ARE GIVEN IN KIP-FT.

3. ANCHOR ROD DESIGN IS BASED ON SHEAR, TENSION, AND COMBINED TENSION AND SHEAR. CHIEF BUILDINGS IS NOT RESPONSIBLE FOR ANCHOR ROD SIZE RECOMMENDATIONS WHEN ANCHOR ROD CONFIGURATION PLACES THE RODS IN A BENDING MODE. WHEN THE COLUMN BASE PLATE BEARS ON GROUT, THE CONTRACTOR / BUILDER OR FOUNDATION ENGINEER SHALL INVESTIGATE BENDING IN THE ANCHOR RODS AND PROVIDE A SHEAR KEY FOR THE COLUMN BASE TO THE PIER WHEN THE ANCHOR RODS ARE NOT ADEQUATE IN BENDING ABOUT THE PIER.

STEEL MATERIAL PROPERTIES AND SPECIFICATIONS:

WELDED WF BEAMS/PLATE ¼" THICK: (ASTM A529, A572) (GR. 55)
WELDED WF BEAMS/PLATE > 1/8" & < ¼" THICK:
ASTM (A1011-SS, A1011-HSLAS, A572) (GR 55)
LIGHT GAGE (16, 14, 12 GA. BLACK): ASTM (A1011-SS, A1011-HLAS) (GR. 55)
ROUND ROD: (ASTM A36)
ROUND PIPE (BLACK): FY = 35 KSI (ASTM A53 GR. B, A500 GR. B)
SQUARE/RECTANGULAR TUBING: ASTM A500 (GR. B)
HOT ROLLED WF BEAMS: ASTM A36; ASTM (A572, A992) (Gr. 50)
HOT ROLLED CHANNEL: ASTM A36; ASTM A572 (GR. 50)
BRACING CABLE: EXTRA HIGH STRENGTH (ASTM A475)
CS & LTC ROOF PANEL (26 & 24 GA. GALVALUME): ASTM A792 (GR. 80)
MSC & STC ROOF PANEL (24 & 22 GA. GALVALUME): ASTM A 792 (GR. 50)
CS & AP WALL PANEL (26 & 24 GA. GALVALUME): ASTM 792 (GR. 80)
MVP/MVP ROOF PANEL (24 & 22 GA. GALVALUME): ASTM A 792 (GR. 50)
CFW WALL PANEL (24 GA. GALVALUME): ASTM A 792 (GR. 50)

REFERENCE NOTES

1. ACTUAL BASE PLATE DIMENSIONS MAY BE SMALLER THAN BASE PLATE DIMENSIONS SHOWN.

REVISIONS

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NOTWITHSTANDING THE ADJACENT SEAL, NEITHER THE ENGINEER NAMED NOR CHIEF BUILDINGS IS ACTING AS THE ENGINEER OF RECORD. THE ENGINEER NAMED AND CHIEF BUILDINGS RESPONSIBILITY IS LIMITED TO THE STRUCTURAL PERFORMANCE OF THE PRE-ENGINEERED COMPONENTS DESIGNED BY CHIEF BUILDINGS.

ANCHOR ROD DRAWINGS
HEATH STEEL / WEAVER CONST. MANAGEMENT
FOUNTAIN, CO
RF 51'-0 1/2"X39'X19'-4" BAYS VARY 3:12

CHIEF BUILDINGS
a division of Chief Industries, Inc.
P.O. BOX 2078
GRAND ISLAND, NE
68802-2078

DRAWN	CHECK	ORDER NO.	A4
RFH	RS	B3004915	
06-08-12	06-08-12		A4