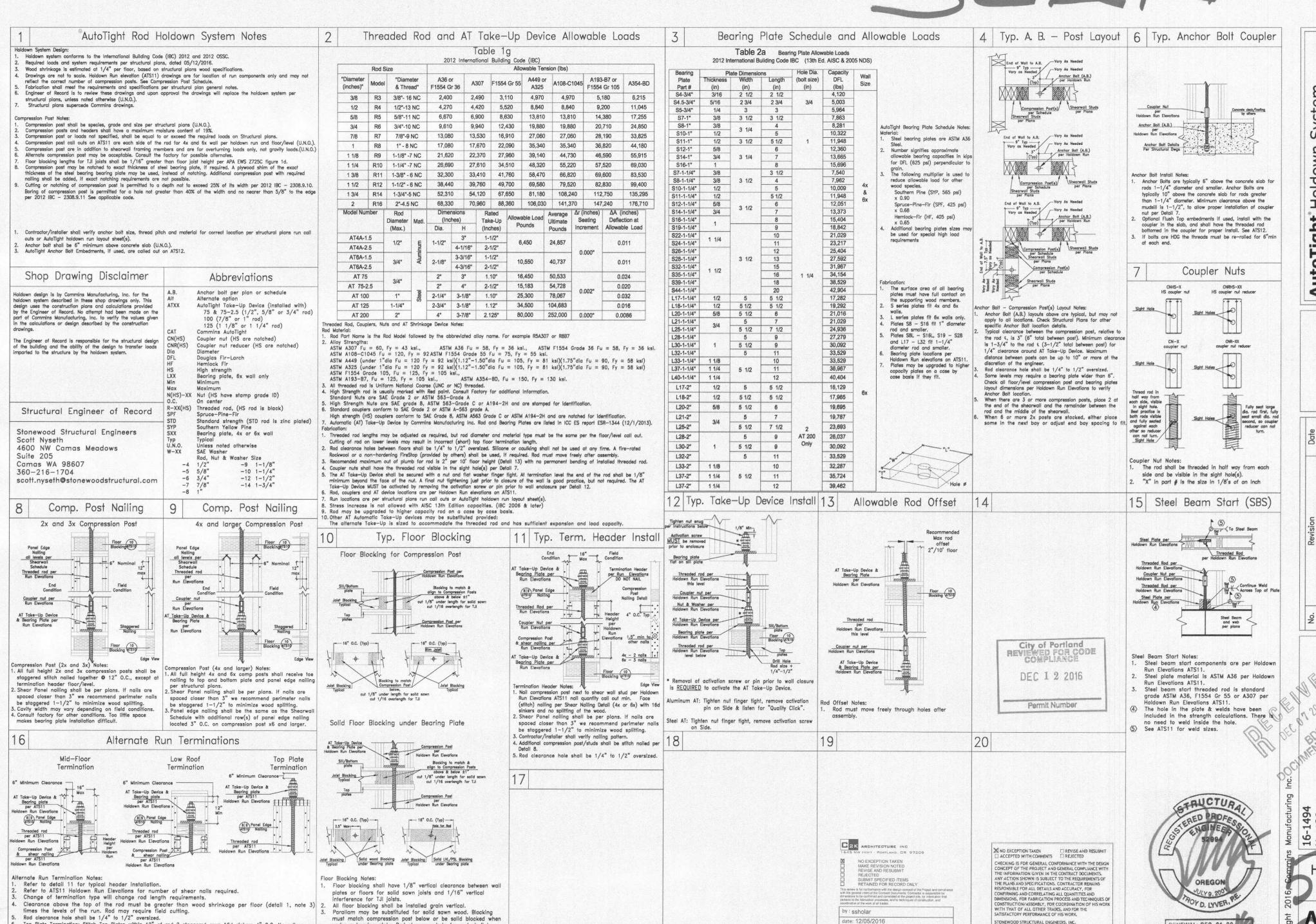
STONEWOOD STRUCTURAL ENGINEERS, INC. BY DAA DATE 12/05/16





Top Plate Termination: Stitch Top Plates within 12" of rod 2 staggered rows 16d sinkers 4" O.C. No splices

under a bearing plate. Rod clearance hole for rod shall be

rod size plus 1/4" - 1/2" oversized. Rod must move freely

through holes after assembly.

oldown System

omminsmfg.com

ns Manufacturing, Inc.

t, Friday Harbor, WA 98250

F: 360.378.9485

AutoTight Holdown Sys www.comminsmfg.co

Revision Date

16-1494 Hoyt20 604 NE 20th / Portland, OR 9

ATS10

RENEWAL: DEC. 31, 20_

6. Compression Posts may be arranged as desired by the builder as long as:

a. The total post quantity is the same as or greater than the quantity listed here.

b. And there is at least 1 post on each side of each rod.

c. Compression Post wood species & grade is DFL No.2 or Better.

d. Compression post lengths shown in schedule are for calculation purposes only. Framer is responsible for actual post lengths.

e. Compression post nail count is total for the whole laminated stack.

7. Concrete Anchor Rods Shall extend 6" Minimum above concrete U.N.O.

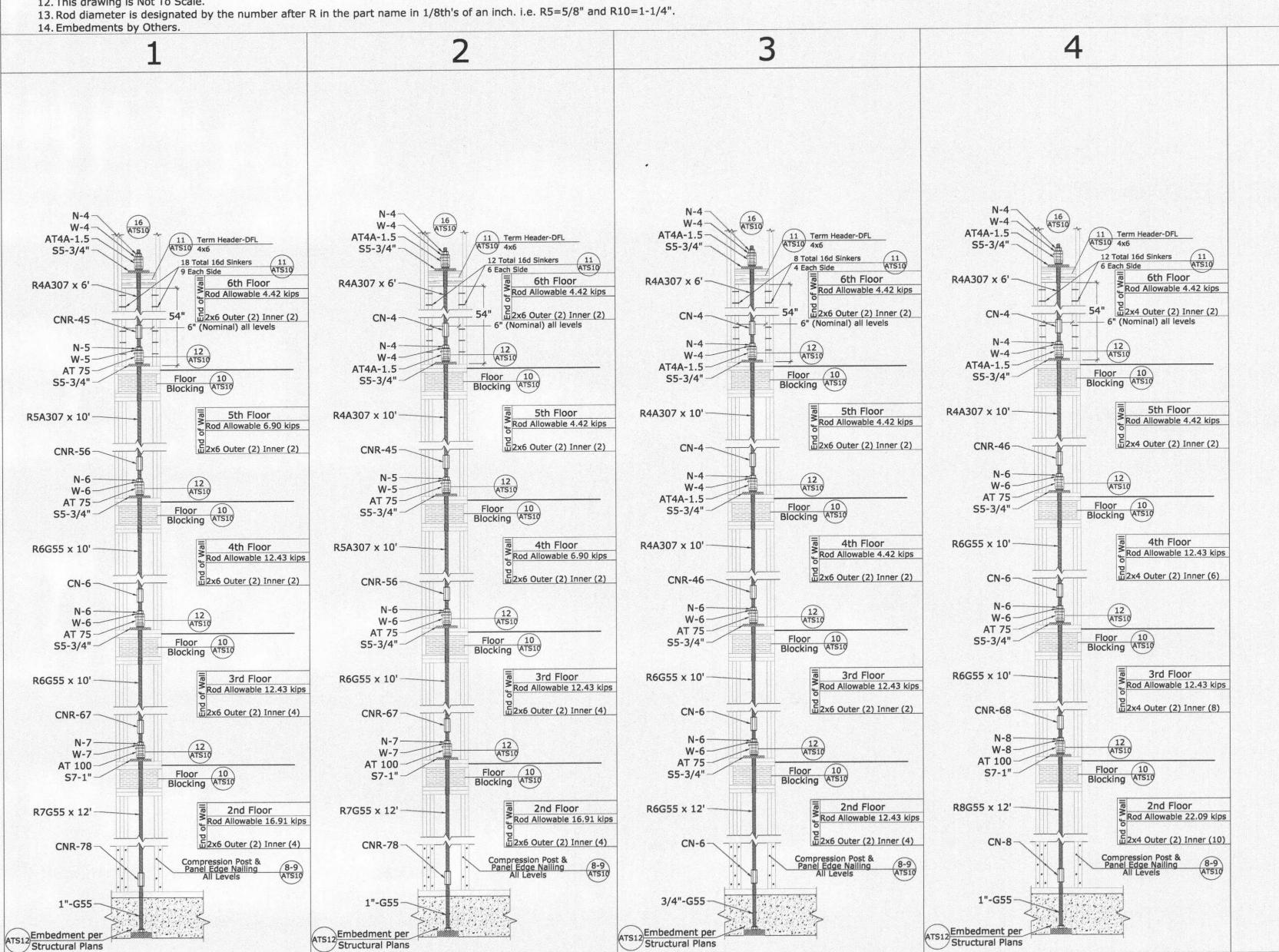
8. Isolator Bushings are not required if Borate is used to pressure treat Sill Plates.

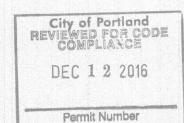
9. Install Term Header flat to fill wall width. Do not nail. It needs to float as building shrinks and settles.

10. Rods listed as G55 are F1554 Grade 55. Rods listed as G36 are F1554 Grade 36. Rods listed as G105 are F1554 Grade 105.

11. In most cases each shear wall is secured by the hardware from the floor above acting through floor plates and bearing blocks. Exception: mid-floor terminations (often the top floor) is secured through a termination header and nailed trimmer studs.

12. This drawing is Not To Scale.







NO EXCEPTION TAKEN REVISE AND RESUBMIT ACCEPTED WITH COMMENTS REJECTED CHECKING IS FOR GENERAL CONFORMANCE WITH THE DESIG CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. ANY ACTION SHOWN IS SUBJECT TO THE REQUIREMENTS THE PLANS AND SPECIFICATIONS. CONTRACTOR REMAINS RESPONSIBLE FOR ALL DETAILS AND ACCURACY, FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS, FOR FABRICATION PROCESS AND TECHNIQUE CONSTRUCTION/ASSEMBLY, FOR COORDINATION OF HIS WORK WITH THAT OF ALL OTHER TRADES, AND FOR THE SATISFACTORY PERFORMANCE OF HIS WORK. STONEWOOD STRUCTURAL ENGINEERS, INC. BY DAA DATE 12/05/16



Hoyt20 Apartments and Hoyt20 Apartments of Hoyt20 A facturing

Holdown Run Elevations

Inc. VA 98250 78.9485 System Friday Harbor, W 84 F: 360.37 by Commins Manufacturing, 60B Guard St., Friday Harbor, W T: 360.378.9484 F: 360.37 www.comminsmfg.com AutoTight Holdown

Anchor Bolt Embedment Notes

Anchor Bolt Embedment Design:

- 1. Anchor Bolt Embedment Design conforms to the 2012 IBC & OSSC 2014.
- 2. Required loads and system requirements are per Final Shear Wall Layout Structural Plan Set S208 dated 08/19/2016.
- 3. Concrete strength is 5,000 psi.
- 5. Fabrication shall meet the requirements and specifications per Structural Plan general notes. 6. Embedment Rod strengths per ATS10 Table 1h.
- 7. Drawing is not to scale.
- 8. Fabrication shall meet the requirements and specifications per Structural Plan general notes.

Anchor Bolt Installation:

- 1. Contractor/installer shall verify anchor bolt size, thread pitch and material for correct location per structural plans and AutoTight holdown run layout
- 2. Anchor Bolt location relative to the end of the shear wall shall be per ATS10 Details 4 and 6.
- 3. Anchor bolt shall be 6" minimum above concrete slab (U.N.O.).

Holdown System Design:

- 1. For system design see Holdown Run Details (ATS10), Holdown Run Elevations (ATS11), and Structural Drawing S601.
- 2. Defer to Structural Plans.
- 3. Fabrication shall meet the requirements and specifications per structural plan general notes.

Shop Drawing Disclaimer

This design uses the construction plans and calculations provided by the Engineer of Record. No Attempt has been made on the part of Commins Manufacturing, Inc. to verify the values given in the calculations or design described by the construction drawings.

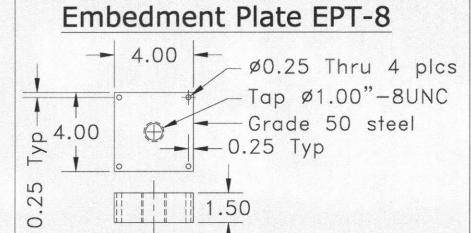
The Engineer of Record is responsible for the structural design of the building and the ability of the design to transfer load imparted to the structure by the holdown

Structural Engineer of Record

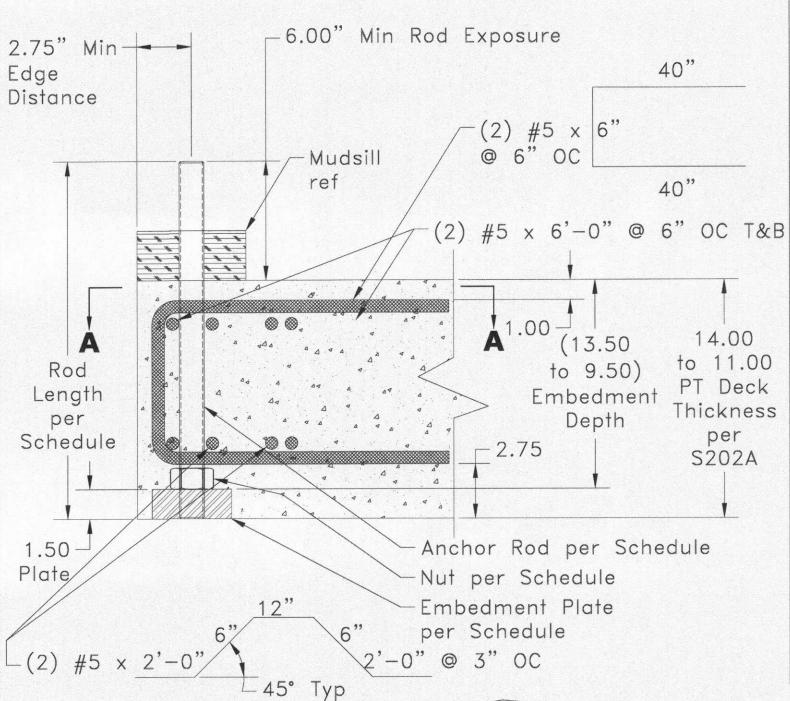
Stonewood Structural Engineers Scott Nyseth 4600 NW Camas Meadows Suite 205 Camas WA 98607 360-216-1704 scott.nyseth@stonewoodstructural.com

Embedment Plate EPT-6 Ø0.25 Thru 4 plcs Tap Ø3/4"-10UNC -Grade 50 steel 4.00 -0.25 Typ 5 0.2

Notes:

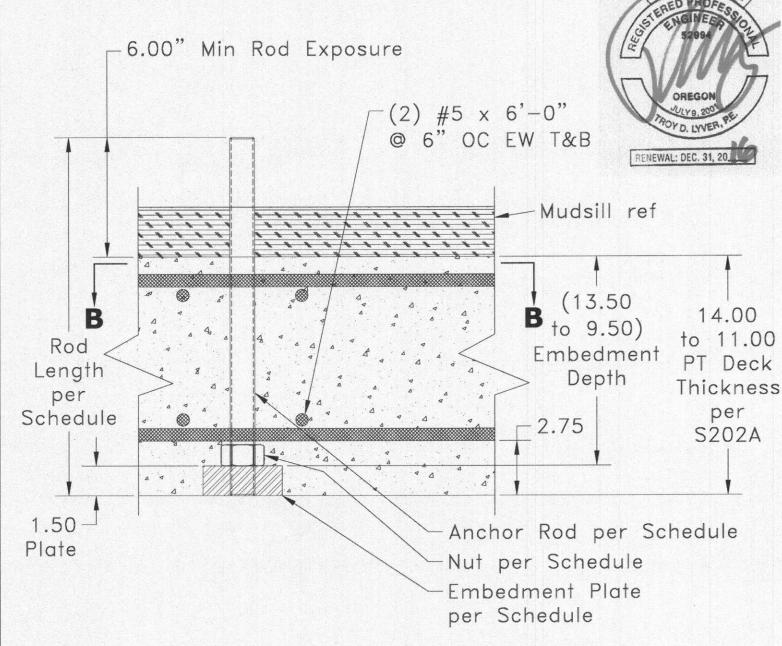


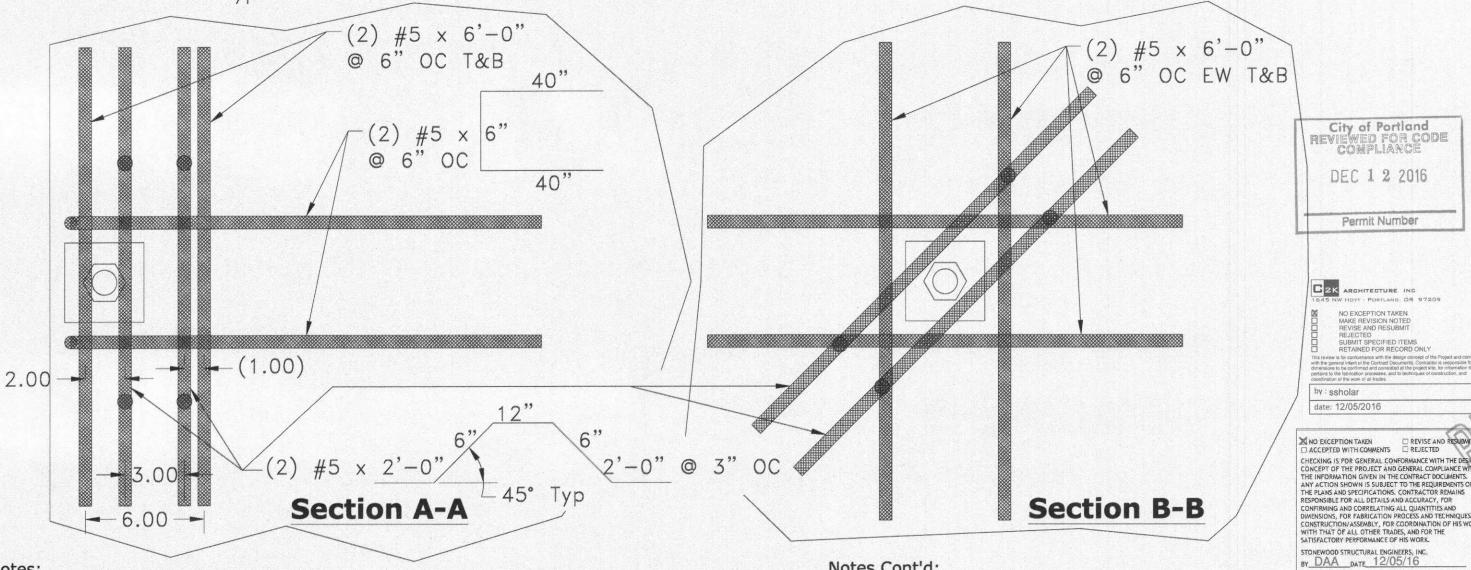
Slab Field & Edge Condition Anchor



1. This drawing shows the Arrangement of the Autotight Components.

Slab Interior Anchor





Notes Cont'd:

- 5. Do not knock assembly out of plumb during the concrete pour.
- 6. Wire embedment securely to rebar to prevent motion during concrete pour.
- 2. All Rods are black unfinished steel. 7. OK to field cut rod to reduce lift-over. Do not violate minimum rod exposure. 3. Field verify concrete depths at all locations. Consider Drop Caps, Drop Soffits Slab Steps etc. 4. Anchor rods are to be located by means of template. Anchor rods shall not be hand set or wet set. 8. Standard thickness nuts may be used for jam nuts.

AutoTight Anchor Bolt Embedment Schedule					
Run Name	Rod	Embedment Plate	Embedment Plate Size	Nut	Washer
3	R6G55 x 24"	EPT-6	1-1/2"x4"x4" Tap 3/4"-10 UNC HOC	N-6	W-6
1, 2 & 4	R8G55 x 24"	EPT-8	1-1/2"x4"x4" Tap 1"-8 UNC HOC	N-8	W-8

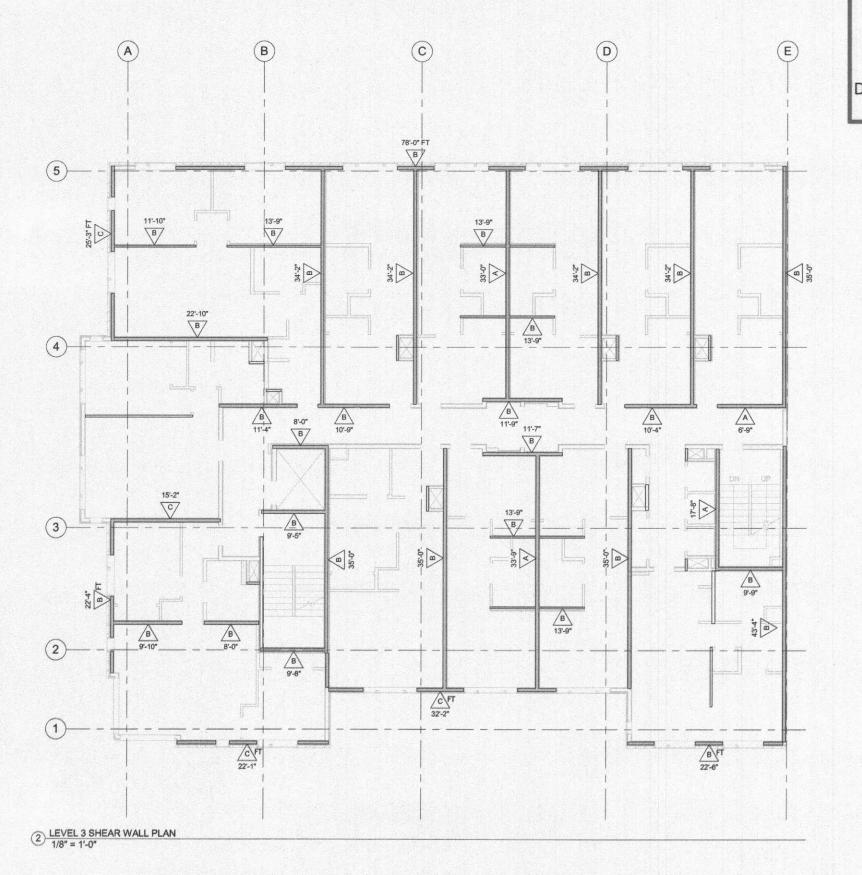
System AutoTight Holdown

DEC 1 2 2016

Permit Number

16-1494 Hoyt20 604 NE 2(Portland,

Anchor Bolt Details



AutoTight (Tie-Down System Run Locator 11-09-16

Date: Rev 2

> The Run Location overlay seen on this sheet were placed by:

Commins Manufacturing, Inc These plans originally generated by:

Stonewood Structura Engineers

Page number of origin plans for reference:

S208 08-19-16



The pupose of the Run Locator Sheet is to determine the run type needed for a particular shear wall.

The markings in the colored icons contain the run types found on sheet(s) AT11, and run ID numbers. A-15 = Run A- ID # 15

This is NOT a dimensional layout sheet to determine where the run will be placed in the wall. Wall Layout is the responsibility of others.

1 LEVEL 2 SHEAR WALL PLAN 1/8" = 1'-0"



16-1494 Hoyt20 604 NE 20th Ave Portland, OR 97232

City of Portland REVIEWED FOR CODE COMPLIANCE DEC 1 2 2016

Permit Number



BZK ARCHITECTURE INC

NO EXCEPTION TAKEN
MAKE REVISION NOTED
REVISE AND RESUBMIT
REJECTED
SUBMIT SPECIFIED ITEMS
RETAINED FOR RECORD ONLY
This review is for conference with the design concept of the with the general rated of the Central Columents. Control cont

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STONFROOD STRICT HEAD ENGINERS. STONEWOOD STRUCTURAL ENGINEERS, INC. BY DAA DATE 12/05/16