

**GENERAL NOTES**

UNLESS SPECIFIED OTHERWISE, THE FOLLOWING GENERAL NOTES SHALL APPLY TO ALL THE PRECAST ERECTION DRAWINGS.

**GENERAL:**

- IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO PROVIDE ANY FIELD MEASUREMENTS REQUIRED ON DRAWINGS.
- IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO COORDINATE PRECAST SHOP DRAWINGS WITH ALL OTHER TRADES. (STRUCTURAL FOUNDATION, ELECTRICAL, STEEL)
- CONTRACTOR RESPONSIBLE FOR DIMENSIONS SHOWN HEREIN, EXPOSED FINISHES, AND CONFORMANCE WITH AESTHETIC REQUIREMENTS IMPOSED BY THE PRECAST PANELS AND CONNECTIONS.
- UNLESS OTHERWISE NOTED ON THE APPROVED DRAWINGS, GENERAL CONTRACTOR APPROVAL INDICATES ALL BUILDING CONDITIONS (COLUMN CENTERLINES, FLOOR ELEVATIONS, FOUNDATION WALLS AND GRADE BEAMS, AND DIMENSIONS) ARE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

**TOLERANCES:**

- PRECAST PRODUCTS WILL BE FABRICATED TO TOLERANCES SPECIFIED IN SECTION 5 OF P.C.I. MNL-118 "MANUAL FOR QUALITY CONTROL FOR PLANTS AND PRODUCTION OF PRECAST CONCRETE PRODUCTS."

**BOWING & MOVEMENT:**

- THIS PRESTRESSED STRUCTURE IS DESIGNED TO MOVE BOWING DUE TO TEMPERATURE DIFFERENTIAL SHOULD BE EXPECTED.

**JOINTS:**

- ALL JOINTS BETWEEN PRECAST MEMBERS OR BETWEEN PRECAST MEMBERS AND WORK BY OTHERS ARE TO BE CONSIDERED NOMINAL DIMENSIONS ONLY. DUE TO PRODUCTION, ERECTION AND GENERAL CONSTRUCTION TOLERANCE, THESE DIMENSIONS CAN VARY.

**OPENINGS:**

- MISSOULA CONCRETE CONSTRUCTION SHALL PROVIDE ONLY THOSE OPENINGS SHOWN ON THEIR SHOP DRAWINGS. NO OPENING SHALL BE CUT OR DRILLED WITHOUT MCC APPROVAL IN WRITING.

**CONCRETE:**

- IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO COORDINATE PRECAST EMBED DRAWINGS WITH THE STRUCTURAL FOUNDATION DRAWINGS.

**ERECTION:**

- ALL FIELD WELDING SHALL BE E70XX.
- ALL CONNECTIONS SHALL BE COMPLETED AS SOON AS POSSIBLE FOLLOWING THE PRECAST MEMBER ERECTION.
- CONSTRUCTION STABILITY OF THE PRECAST STRUCTURE DURING THE ERECTION IS THE RESPONSIBILITY OF THE PRECAST ERECTOR.
- ERECTOR SHALL SURVEY THE SITE BEFORE ERECTION AND CONSTANTLY EXAMINE THE PLUMB AND ALIGNMENT OF THE PRECAST MEMBER.

**ERECTION STEEL:**

- MATERIAL SUPPLIED SHALL BE AS SPECIFIED BELOW UNLESS OTHERWISE NOTED IN CONNECTION DETAILS AND DESIGN.
  - HOT ROLLED STEEL: A36
  - BOLTS: GRADE 5
  - THREADED RODS: GRADE 2
  - REBAR: GRADE 60
  - COIL RODS: HIGH TENSILE

**FIELD DRILLED ANCHORS:**

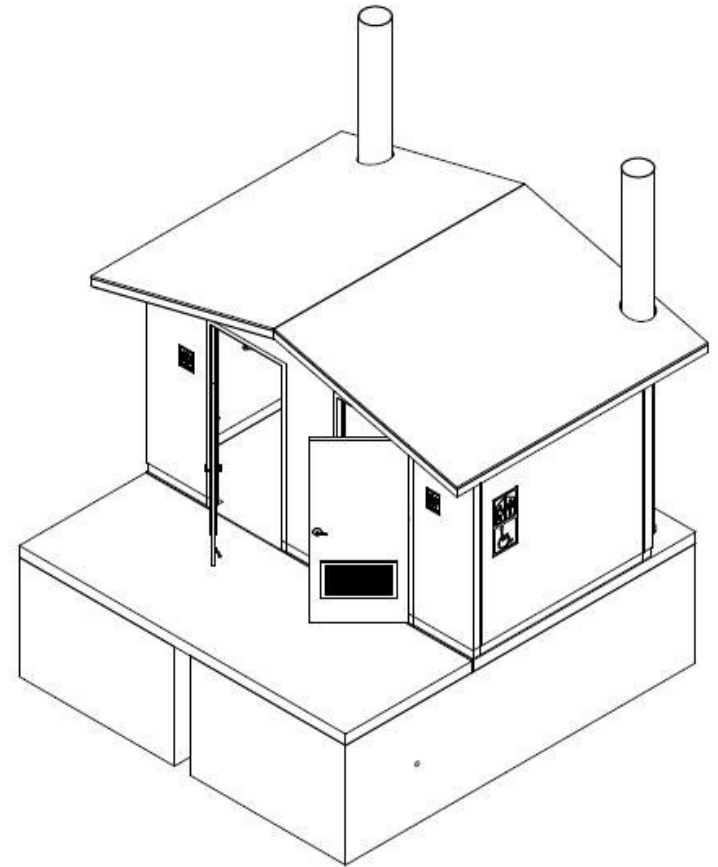
- NO FIELD DRILLED ANCHORS SHALL BE APPLIED TO ANY PRECAST MEMBER WITHOUT MCC WRITTEN APPROVAL.

**SOIL:**

- CONTRACTOR RESPONSIBILITY TO VERIFY THAT VAULTS ARE PLACED ON SOLID NATIVE, INORGANIC, UNDISTURBED SOIL OR APPROVED COMPACTED FILL. BEARING CAPACITY OF SOIL TO BE VERIFIED BY OTHERS.

**NOTES**

- PRESTRESS-AE MIX DESIGN - ONE CY
  - \*ALL FLOOR, ROOF & WALL PANELS\*
    - CEMENT: 650 LBS (HOLCIM TYPE III)
    - WATER: 29 GAL. (NOT TO EXCEED 31 GAL.)
    - COARSE AGG. 3/4": 979 LBS (1% MOISTURE)
    - COARSE AGG. 1/2": 765 LBS (1% MOISTURE)
    - SAND: 1,284 LBS (SSD)
    - AIR CONTENT: 4-7%
    - BASF MASTERAIR® AE-90: AS REQ'D
    - BASF MASTERGLENIUM® 7500: 48 OZ.
    - BASF MASTERSET® AC 534: 2-12 OZ./100 LBS. CEMENT (AS REQUIRED)
    - WATER / CEMENT RATIO (MAX.): .397
    - PRESTRESS TRANSFER STRENGTH: 3,500 PSI
    - PRECAST STRIPPING STRENGTH: 2,500 PSI
    - FINAL STRENGTH: 5,000 PSI
    - CONCRETE AGGREGATE: STATE SPECIFICATION MATERIAL SUPPLIED BY L.S. JENSEN.
- SCC MIX DESIGN - ONE CY
  - \*GRADE BEAMS & VAULTS\*
    - CEMENT: 752 LBS (HOLCIM TYPE III)
    - WATER: 34 GAL. (NOT TO EXCEED 36 GAL.)
    - COARSE AGG. 3/4": 764 LBS (1% MOISTURE)
    - COARSE AGG. 1/2": 765 LBS (1% MOISTURE)
    - SAND: 1,336 LBS (SSD)
    - BASF MASTERGLENIUM® 7500: 90 OZ.
    - BASF MASTERSET® AC 534: 2-12 OZ./100 LBS. CEMENT (AS REQUIRED)
    - BASF MASTERMATRIX® VMA 362 (IF REQUIRED)
    - WATER / CEMENT RATIO (MAX.): .399
    - PRECAST STRIPPING STRENGTH: 2,500 PSI
    - FINAL STRENGTH: 5,000 PSI
    - CONCRETE AGGREGATE: STATE SPECIFICATION MATERIAL SUPPLIED BY L.S. JENSEN.
- ALL REBAR IS GRADE 60 (ASTM A615).
- REINFORCING WILL BE FASTENED WITH STANDARD WIRE TIES.
- PRESTRESS STRAND (IF REQ'D) SHALL BE 270 KSI, 7 WIRE, LOW RELAXATION.
- EXTERIOR SHALL HAVE BARNWOOD TEXTURE WITH "MEDIUM BROWN" STAIN ENHANCEMENT.
- ROOF SHALL HAVE SIMULATED SHAKE TEXTURE.
- SEE ASPEN VAULT TOILET SPECIFICATION FOR COMPLETE SPECIFICATIONS.

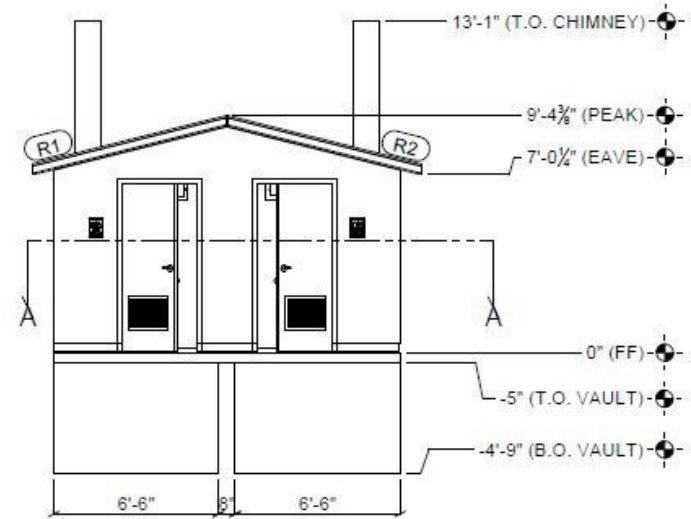
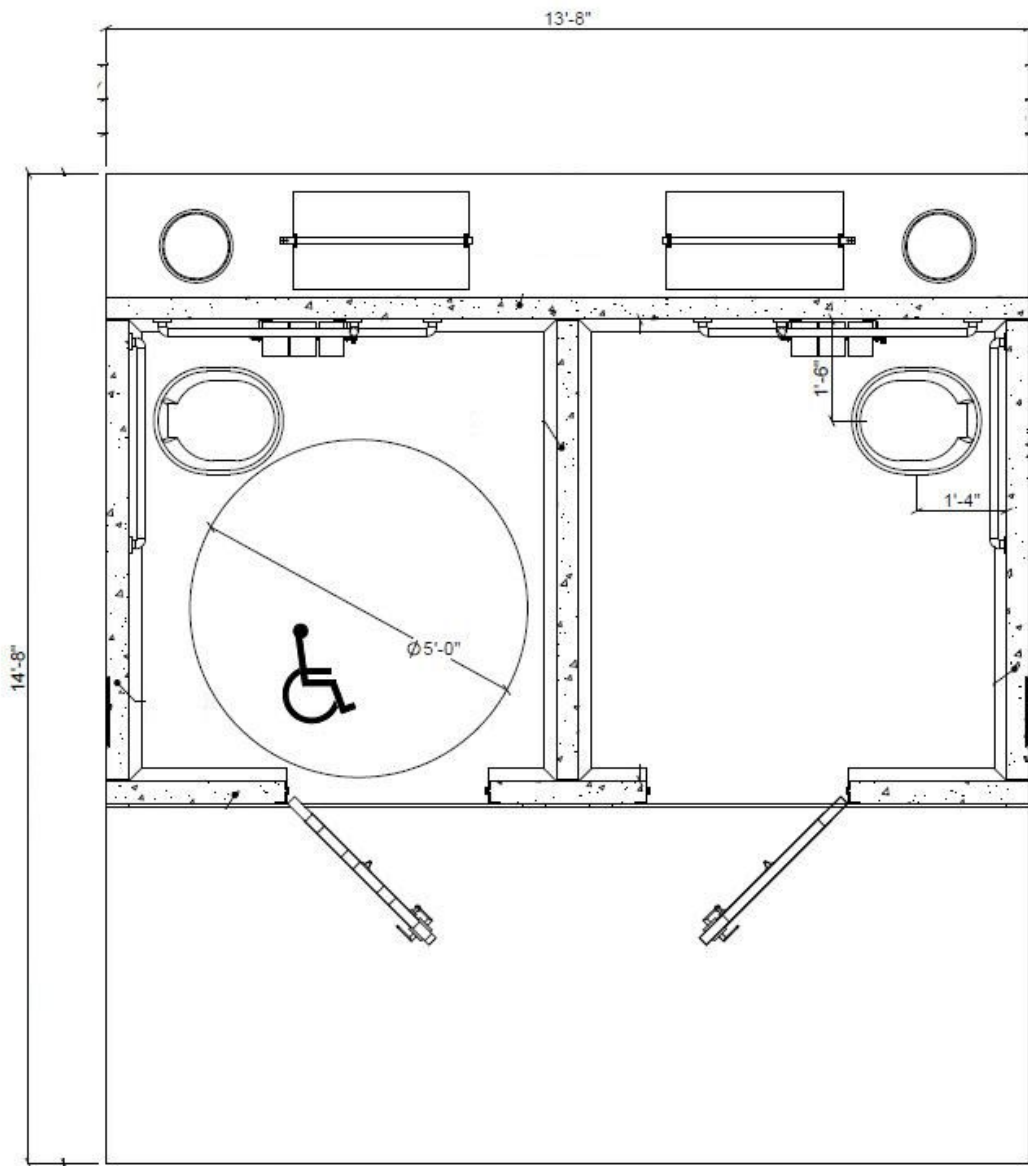


| WEIGHT   |                 |
|----------|-----------------|
| BUILDING | 38,000 LBS.     |
| SLAB     | 4700 LBS.       |
| VAULT    | 16,000 LBS (EA) |

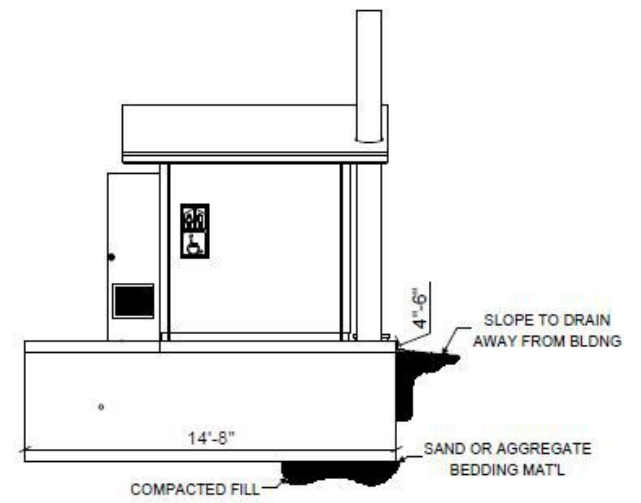
**MISSOULA  
CONCRETE  
CONSTRUCTION**

P: 406.549.9662 F: 406.549.6404  
P.O. Box 16096  
Missoula, MT 59808-6096  
www.missoulaconcrete.com


|                  |   |           |
|------------------|---|-----------|
| DATE: Apr 9 2018 | PROJECT: Double Vault Toilet without Screen | DRAWN BY: |
| REVISED:         | CONTRACTOR: Missoula Concrete Construction  | SCALE:    |
|                  | TITLE: SPECIFICATIONS                       | SHEET:    |

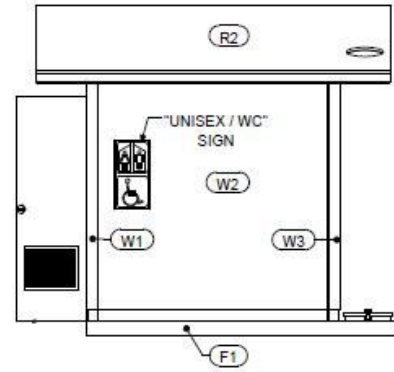
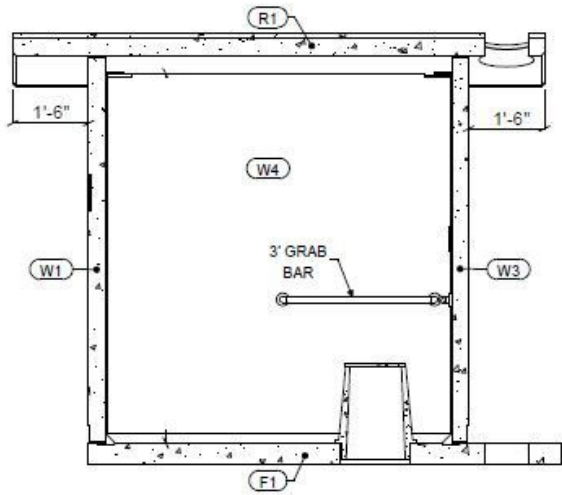


1 FRONT VIEW

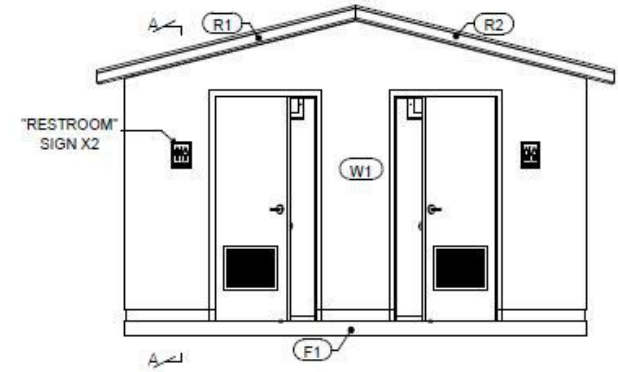


2 SIDE VIEW

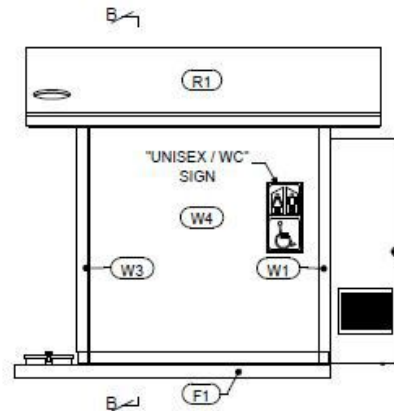
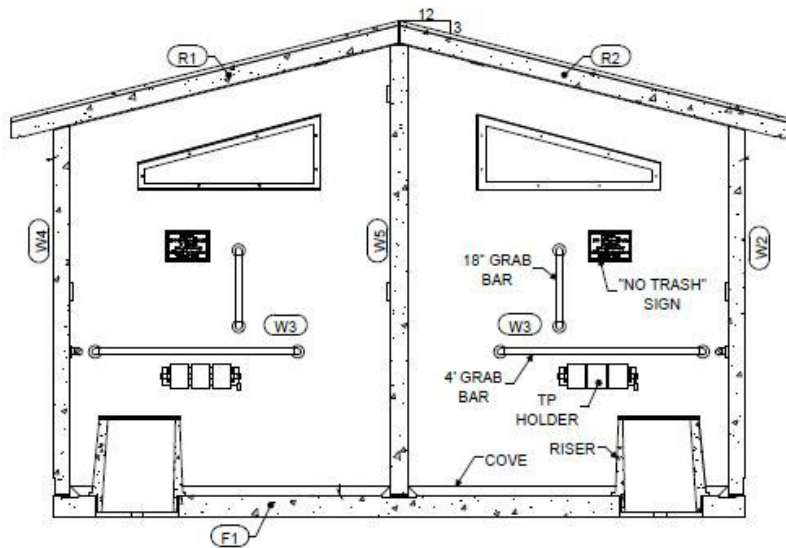
|   |                  |   |           |
|---|------------------|---|-----------|
|  <b>MISSOULA<br/>CONCRETE<br/>CONSTRUCTION</b><br><small>P. 406.549.9682 F. 406.549.6404<br/>P.O. Box 16086<br/>Missoula, MT 59808-5086<br/>www.missoulaconcrete.com</small> | DATE: Apr 9 2018 | PROJECT: Double Vault Toilet without Screen | DRAWN BY: |
|   | REVISED:         | CONTRACTOR: Missoula Concrete Construction  | SCALE:    |
|   |                  | TITLE: PLAN                                 | SHEET:    |
|   |                  |   |           |
|   |                  |   |           |



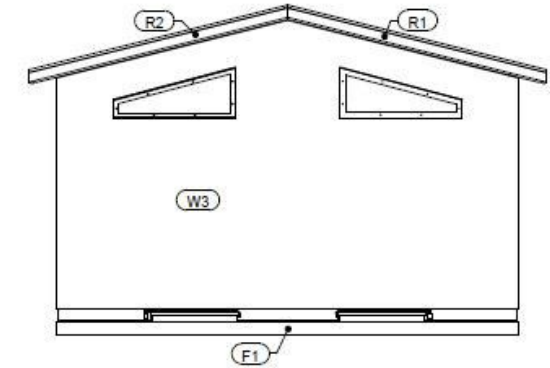
2 RIGHT ELEVATION




1 FRONT ELEVATION



4 LEFT ELEVATION



3 BACK ELEVATION

|   |                  |   |           |
|---|------------------|---|-----------|
|  <b>MISSOULA<br/>CONCRETE<br/>CONSTRUCTION</b><br><small>P. 406.549.9682 F. 406.549.6404<br/>P.O. Box 16086<br/>Missoula, MT 59809-0886<br/>www.missoulaconcrete.com</small> | DATE: Apr 9 2018 | PROJECT: Double Vault Toilet without Screen | DRAWN BY: |
|   | REVISED:         | CONTRACTOR: Missoula Concrete Construction  | SCALE:    |
|   |                  | TITLE: ELEVATIONS / SECTIONS                | SHEET:    |
|   |                  |   |           |