

DISTRIBUTION CONSTRUCTION STANDARD EUGENE WATER & ELECTRIC BOARD - EUGENE, OREGON

> REV. 15

4' 8" X 4' 8" X 4' CONCRETE VAULT WITH 4' 8" X 4' 8" X 6", 5' X 5' X 6", 4' 8" X 4' 8" X 4" AND 5' X 5' X 4" CONCRETE LIDS Page 1 of 4

ASSEMBLY EC5-2.1101

4' 8" X 4' 8" X 4' CONCRETE VAULT

1. 348-0000535 1 EA VAULT 4'8"X4'8"X4' CONCT

ASSEMBLY EC5-2.1102

4' 8" X 4' 8" X 4' CONCRETE VAULT AND 4' 8" X 4' 8" LID WITH 3' X 3' STEEL DOOR

- VAULT 4'8"X4'8"X4' CONCT 1. 348-0000535 1 EA
- 2. 348-0000500 1 EA LID4'8"X4'8"X6" W/3'X3' DOOR
- 3. 348-0000546 1 EA FRAME SDWLK 4'8" X 4'8"

ASSEMBLY NOTES:

1. Assembly EC5-2.1102 is also used for EWEB Fiber Optic as splice boxes for slack loops and splice closures.

ASSEMBLY EC5-2.1103

4' 8" X 4' 8" X 4' CONCRETE VAULT AND 5' X 5' LID WITH 3' X 3' STEEL DOOR

- 1 EA VAULT 4'8"X4'8"X4' CONCT 1. 348-0000535
- 2. 348-0000502 1 EA LID 5'X5'X6" W/3'X3' DOOR
- 3. 348-0000545 1 EA FRAME SDWLK 5' X 5'

ASSEMBLY NOTES:

1. Assembly EC5-2.1103 is also used for EWEB Fiber Optic as splice boxes for slack loops and splice closures.

ASSEMBLY EC5-2.1104

4' 8" X 4' 8" X 6" LID WITH 3' X 3' STEEL DOOR

LID4'8"X4'8"X6" W/3'X3' DOOR 2. 348-0000500 1 EA

ASSEMBLY EC5-2.1105

5' X 5' X 6" LID WITH 3' X 3' STEEL DOOR

2. 348-0000502 1 EA LID 5'X5'X6" W/3'X3' DOOR

ASSEMBLY EC5-2.1106

4' 8" X 4' 8" X 4" LID WITH 3' X 3' DOOR

2. 348-0000499 1 EA LID 4'8"X4'8"X4"W/3'X3' DOOR

ASSEMBLY EC5-2.1107

5' X 5' X 4" CONCRETE LID WITH 3' X 3' STEEL DOOR

1. 348-0000501 1 EA LID 5'X5'X4" W/3'X3' DOOR

ASSEMBLY EC5-2.1108

4' 8" X 4' 8" X 4' CONCRETE VAULT AND 4' 8" X 4' 8" LID WITH 3' X 3' STEEL DOOR

1 EA VAULT 4'8"X4'8"X4' CONCT 1. 348-0000535 2. 348-0000500 1 EA LID4'8"X4'8"X6" W/3'X3' DOOR

ASSEMBLY NOTES:

1. Assembly EC5-2.1108 does not include a sidewalk inset ring for design purposes.

ASSEMBLY EC5-2.1109

4' 8" X 4' 8" X 4' CONCRETE VAULT AND 5' X 5' LID WITH 3' X 3' STEEL DOOR

- 1 EA VAULT 4'8"X4'8"X4' CONCT 1. 348-0000535 2. 348-0000502
 - 1 EA LID 5'X5'X6" W/3'X3' DOOR

ASSEMBLY NOTES:

1. Assembly EC5-2.1109 does not include a sidewalk inset ring for design purposes.

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4 8 X 4 8 X 4 CONCRETE VAULT WITH 4 8 X 4 8 X 0 , 5 X 5 X 0 , 4 8 X 4' 8" X 4" AND 5' X 5' X 4" CONCRETE LIDS	Approved Jun 07, 2016 EC5-2.1100 Page 2 of 4	REV. 15

ASSEMBLY EC5-2.1110

4' 8" X 4' 8" SIDE WALK INSET RING

1. 348-0000546 1 EA FRAME SDWLK 4'8" X 4'8"

ASSEMBLY EC5-2.1111

5' X 5' SIDEWALK INSET RING

3. 348-0000545 1 EA FRAME SDWLK 5' X 5'

CONSTRUCTION NOTES:

1. Base for vault shall be 8" (minimum) compacted 3/4" minus crushed rock.

2. Galvanized non slip steel plate door shall open away from street or traffic area.

3. Conduits shall enter and exit vaults in the positions indicated on the Construction Drawing, level and perpendicular to the vault and shall be grouted to provide a watertight seal with a smooth finish. Grout to be Redline "Speedcrete" or equivalent.

4. Conduits shall extend into the box 11/2" +/- 1/2", cut off square, chamfered, free of any sharp edges and temporarily sealed to prevent rocks or other materials from entering them after mandreling.

5. Vaults shall be clean and free of rocks, dirt and debris prior to final inspection.

6. Excavated area around all vaults and boxes shall be backfilled to final grade with 3/4" minus crushed rock.

7. Vault lid to be set 2" above the surrounding final grade, if not located in a sidewalk, parking area or other pedestrian areas that would cause a "trip hazard".

8. Install sidewalk inset ring with flat bar tabs as shown on vault lid. EWEB crew to remove flat bar tabs.

DESIGN NOTES:

1. Maximum size and number of 3 phase secondary conductors allowed in 4' 8" x 4' 8" vault shall not exceed a total number of (8) 500 kcm conductors per phase.

2. When using this vault as a secondary box, a secondary mole support bracket EC5-9.0504 is required for each secondary mole.

3. An above ground sectionalizing enclosure is the "preferred" installation for a junction box, where applicable.

4. Vault assembly EC5-2.1101 is designed for H20 "Traffic Rated" wheel loading. It can be located when used with a traffic rated lid, in roadways, alleys, driveways, truck parking areas, fire truck access locations and airport vehicle traffic areas. This vault is NOT designed for any size of "Aircraft" wheel loading and SHALL NOT be located in these areas.

5. All lid assemblies EC5-2.1104 through EC5-2.1107 is designed for H20 "Non Roadway" wheel loading. Assemblies EC5-2.1106 and EC5-2.1107 SHALL be located in off street locations such as sidewalks, planter and landscape areas.

6. Lid assemblies EC5-2.1104 and EC4-2.1105 can also be located in parking spaces, but not in any main driving pathways.

7. Refer to GC5-2.4000 for the 4' 8" x 4' 8" x 4' concrete vault knockout entrance template detail when using a 3' x 3' lid for electric applications.

8. For new construction, an above ground sectionalizing enclosure or pulling vault is required within approximately 50 ft. up to a maximum of 100 ft. of any primary single phase, three phase or feeder pole dip installation to remedy safety concerns and reduce pulling tensions when pulling in conductors. Any deviation requires electric operations approval.

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REFERENCE STANDARDS:

A) Refer to EC5-3.0800 for grounding detail.

B) Refer to EC5-4.5600 for loadbreak module assemblies.

C) Refer to EC5-4.3500 for loadbreak elbow assemblies.

D) Refer to EC5-4.2900 for 200 amp cable splice assembly.

E) Refer to EC5-6.3400 for 350 & 500 KCM urd underground moles.

F) Refer to EC5-6.3500 for 750 KCM urd underground moles.

G) Refer to EC5-9.0500 for conductor support and secondary mole support brackets.

H) Refer to GC5-2.3600 for mandreling and cleaning of conduits.

Refer to GC5-2.3900 for entering and exiting concrete vaults/boxes conduit detail.

J) Refer to EC5-2.1700 for solid lids with inset rings.

K) Refer to EC5-2.0100 for required minimum feeder, primary and secondary/service conductor makeup length for vaults and secondary boxes.

L) Refer to ED5-1.0400 for Working Clearances around padmounted equipment.

M) Refer to EC5-A.0500 for Customer requirements for vegetation management for underground systems.

N) Refer to ED5-1.6000 for Low voltage design tool.

O) Refer to ED5-1.7000 for Underground Cable pulling program, Pull planning user guide.

P) Refer to ED5-1.8000 for Underground Loop circuit requirements.

Q) Refer to GC5-2.4000 for 4' 8" x 4' 8" x 4' concrete vault knockout entrance template detail, used with 3' x 3' lid for electric applications.

R) Refer to FC5-5.0500 for Splice Closure, 288 Fiber Splice Capacity

S) Refer to Specification ES5-2.1100.07B for EWEB Stock code # 348-0000500.

T) Refer to Specification ES5-2.1100.09 for EWEB Stock code # 348-0000502.

U) Refer to Specification ES5-2.1100.07A for EWEB Stock code # 348-0000499.

V) Refer to Specification ES5-2.1100.20 for EWEB Stock code # 348-0000535.

W) Refer to Specification ES5-2.1100.08 for EWEB Stock code # 348-0000501.

X) Refer to Specification ES5-2.1110.03 for EWEB Stock code # 348-0000546 and 348-0000545.

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