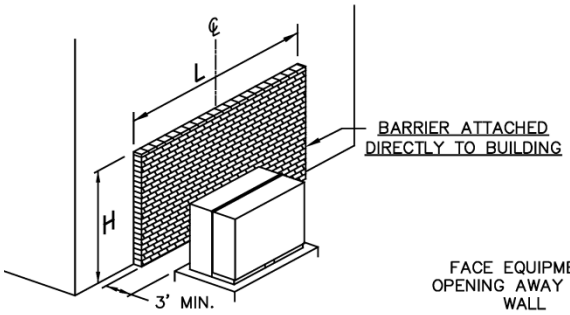
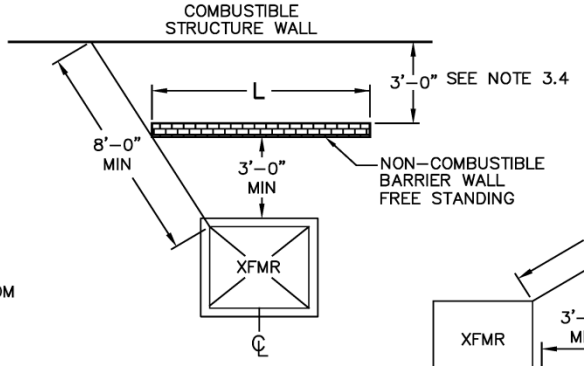
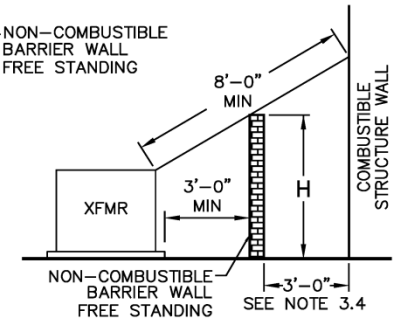


DETAIL "B"

FACE EQUIPMENT
OPENING AWAY FROM
WALL



PLAN VIEW

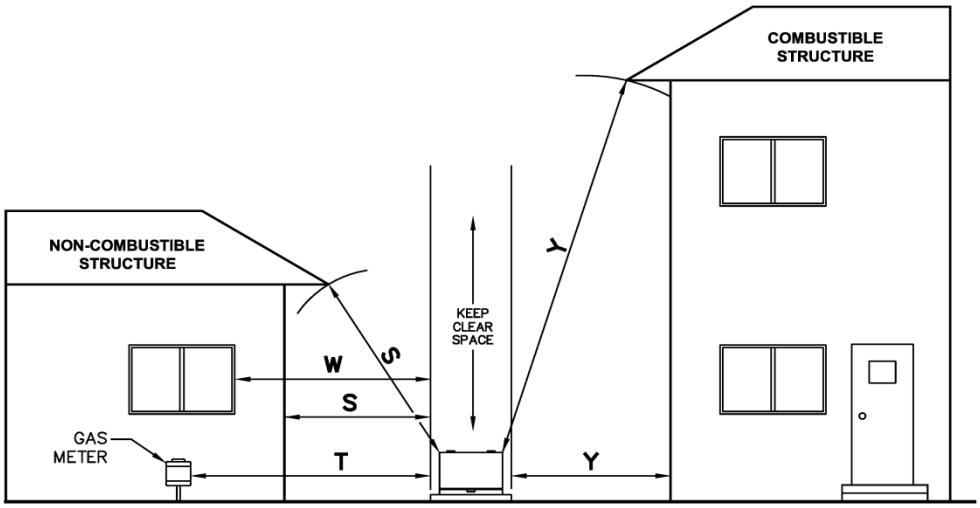


ELEVATION VIEW

DETAIL "C"

NON–COMBUSTIBLE BARRIER WALL DIMENSION REQUIREMENTS					
XFMR TYPE	XFMR SIZE	BARRIER ATTACHED TO BUILDING		BARRIER WALL FREE STANDING	
		HEIGHT (H)	LENGTH (L)	HEIGHT (H)	LENGTH (L)
SINGLE PHASE	25–167 KVA	10'	20'	6'	9'
THREE PHASE	75–2000 KVA	14'	22'	9'	12'

DETAIL "A"



MINIMUM DISTANCES REQUIRED FROM STRUCTURE TO TRANSFORMER PAD/VAULT EDGE	
DISTANCE (minimum)	STRUCTURE FEATURES
Y= 8 ft.	COMBUSTIBLE BUILDING WALL OR OVERHANG
S= 3 ft.	NON–COMBUSTIBLE BUILDING WALL OR OVERHANG
W= 8 ft.	TO ANY OPENING (IE., WINDOWS, DOORS, UPPER LEVEL FIRE ESCAPES AND BALCONIES).
T= 20 ft.	TO COMBUSTIBLE LIQUID, GAS TANKS OR GAS METERS. (SEE NOTE 2.5)

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

PADMOUNT TRANSFORMER PLACEMENT CLEARANCES FROM STRUCTURES

Approved Sep17, 2013
ED5-1.0500
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REV
2

1.0 SCOPE

1.1 This standard is to inform Eugene Water and Electric Board (EWEB) customers the minimum Horizontal distances required from a Combustible and Non-Combustible structure to a transformer pad, or vault edge.

2.0 TRANSFORMER PLACEMENT REQUIREMENTS

2.1 Transformer **SHALL** be located a minimum distance of 5 feet and a maximum distance of 15 feet from a maintained drivable surface.

2.2 EWEB facilities easement includes aerial space above equipment. Any requests to build over EWEB equipment would require a request for exception.

2.3 Keep area clear above transformer for use of EWEB's boom truck, the boom is required for lifting equipment and this clear space **SHALL** be maintained for future equipment replacements.

2.4 Bollard posts **SHALL** be installed to protect Padmounted transformers wherever vehicular traffic poses a threat.

2.5 Transformer **SHALL** be located a minimum distance of 20 feet from facilities used to store or dispense combustible liquids or gases, such as service station gas pumps and tanks, propane bulk dispensing tanks, and natural gas connections, gauges, valves or meters.

3.0 NON-COMBUSTIBLE BARRIER WALL MINIMUM REQUIREMENTS

3.1 Where it is not practical to obtain the specified clearances between EWEB's equipment and a Combustible building surface(s), doors, air intakes or windows, the customer may provide a Non-Combustible barrier wall made of fire-resistant materials that meet EWEB's minimum dimension requirements and all applicable fire and building codes. See Details A, B and C on page 1 of 3.

3.2 EWEB customers are responsible for all costs associated with the constructions, installation and maintenance of a Non-Combustible barrier wall. Customers to coordinate location of Non-Combustible barrier wall with EWEB's Electric Distribution design tech prior to installation.

3.3 The dimensions shown for the Non-Combustible barrier wall will accommodate up to the largest transformer size on either single or three phase transformers.

3.4 EWEB's Non-Combustible free standing barrier wall dimension requirements are calculated and based on a 3'-0" distance from the Non-Combustible barrier wall to a Combustible building structure. For distances less than a 3'-0" distance, refer to Electric Distribution Engineering for assistance.

4.0 NON-COMBUSTIBLE BUILDING MATERIALS

4.1 For building materials to be accepted as noncombustible, they shall meet the criteria described in section 703.5 of the International Building Code which requires the following:

4.2 The base material shall pass ASTM E136, Standard Test Method for the Behavior of Materials in a Vertical Tube Furnace at 750 degrees C.

4.3 Any surfacing layer, (if present), shall not be more than 0.125 inch thick and shall have a flame spread index not greater than 50 when tested in accordance with ASTM E84, Standard Test Method for Surface Burning Characteristics of Building Materials.

4.4 Note: Hardiplank is a siding material that meets the criteria to be accepted as noncombustible.

5.0 REFERENCE STANDARDS

A Refer to ED5-1.0400 for working clearances around Padmounted equipment.

B Refer to EC5-A.0500 for customer requirements for vegetation management for underground system.

C Refer to ED5-1.0800 for bollard post placement for Padmounted equipment.

D Refer to EC5-9.2600 3 1/2" OD x 7'-0" screw type bollard post, 8" helix, 6.625" OD x 6'-0" galvanized steel bollard post, sleeve for removable post.