

DIVISION 26 - ELECTRICAL

SECTION 26 12 16 – DRY-TYPE, MEDIUM-VOLTAGE TRANSFORMERS

PART 1: GENERAL

1.01 Scope of Standard

- A. This standard provides general guidance concerning the specific preferences of Texas State University for Dry-Type, Medium-Voltage Transformers.
- B. Texas State University recognizes that project conditions and requirements vary, thus precluding the absolute adherence to the items identified herein in all cases. However, unless there is adequate written justification, it is expected that these guidelines will govern the design and specifications for Texas State University projects.

1.02 Scope of Work

- A. This section includes enclosed dry type transformers for lighting and power loads, with primaries rated at 15,000 volts.
- B. This is a design standard and is not intended to be used as a construction specification.

PART 2: PRODUCTS

- A. All 15KV Dry-type transformers shall meet these specifications:

Standard: ANSI

UL Listing: UL Labeled

Primary Voltage: 12,470 Delta 95KV BIL

Feed: Radial

Frequency: 60 HZ

Nominal Impedance: ANSI Standard

Sound Level: NEMA Standard

Primary Arrestors: 3ea – 15KV

No Switches

No Fuses

- B. Acceptable transformer manufacturers:
 - 1. Cooper Industries
 - 2. Cutler Hammer/Seimens

3. General Electric
- C. Installation:
 1. Each transformer is to be placed on a housekeeping pad of suitable height.
 2. Safety Design Issues
 - a. Install signs stating "DANGER HIGH VOLTAGE" on exterior panels.
 - b. The signs shall use at least 1 _" red lettering on a 3" white background.

PART 3: EXECUTION

3.01 Design/Drawing Requirements

- A. Distribution transformers shall be designed for location on the ground floor. The electrical engineer is responsible for coordinating maximum transformer weights and anticipated floor loading with the project structural engineer.
- B. Transformers installed in electrical rooms shall be designed and sized in coordination with architect and door dimensions.
- C. Electrical engineer shall provide detail layouts of electrical rooms indicating transformer locations drawn to scale with special mounting instructions as appropriate.
- D. Transformers for Non-Linear Loads (K-rated) shall be used at the engineer's discretion.
- E. Factory color for Exterior Transformers:
 1. The factory applied color shall match Sherwin Williams SW6108 "Latte".

END OF SECTION 26 12 16