FACILITIES STANDARD

NAME : Medical Oxygen Systems
NUMBER : 15310
ORIGINAL DATE : 01-05-98
REVISION DATE :

PURPOSE:

1. The general purpose of each Facilities Standard is to provide minimal criteria for construction materials at University facilities regarding code compliance, warranty, approved products, execution and uniformity.

2. To protect the health and safety of patients, visitors, students, faculty and staff, in addition to protecting non-project UAB property, all construction must be in accordance with: NFPA 241 safeguarding construction, alteration and demolition operations; Standard Building Code, Chapter 33, regarding site work, demolition and construction; NFPA 101 Life Safety Code.

3. Construction safety is the responsibility of the contractor in accordance with the regulations and codes of the agency having jurisdiction, and according to the guidelines adapted by OSHA.

4. The **Medical Oxygen Systems Facilities Standard** establishes a series of guidelines for specifying this particular item on any construction project at the University. ***This Facilities Standard is not to be regarded as a specification***.

GENERAL:

A. All medical oxygen system installations shall comply with NFPA 99 and 99C Standards and any state and local codes.

B. Piping shall conform to ASTM B88 Standard Specification for seamless copper tube.

PRODUCTS:

A. Outlets: All University Hospital medical oxygen outlets shall be Ohio Medical “Diamond III” outlets unless specifically stated otherwise.

B. Piping: Copper tube, ASTM B88, Type K, hard temper, especially cleaned and prepared for oxygen service, with wrought copper fittings especially prepared for oxygen service.

C. Valves: Section valves shall be in recessed boxes. Section valves shall be manufactured by Ohio Medical Products unless otherwise approved. Valves shall come with factory brazed tube extensions, and shall be pressure tested, cleaned for oxygen service, and capped. Valves shall be ball-type.

D. Pipe Joints: Brazing with Sil-Phos.

EXECUTION:

A. Piping shall not be installed in floor slabs.

B. Piping installed in solid walls shall not be permitted unless installed in a chase or casing.

C. Piping inside any building shall not be run in or through an air duct, clothes chute, chimney or vent, ventilating duct, dumbwaiter, or elevator shaft.

D. Piping shall be supported at five foot intervals. Multiple pipes shall be hung together where possible.

E. While being brazed, joints shall be continuously purged with dry nitrogen.

F. Section valves (in recessed boxes) shall be installed in a corridor with top of box 66” above finished floor. Recessed boxes may contain up to five valves serving different medical gases.

G. All oxygen piping systems shall be tested for cross-connection and shall be certified by qualified personnel other than the installing contractor.

H. All oxygen piping shall be clearly labeled as such. The labels shall be placed at intervals of not more than 20 feet. There shall be at least one label in each room and one in each story traversed by the piping system.

I. All penetrations through fire resisting assemblies shall be sealed in accordance with Standard Building Code Section 05.4 to ensure the rating of the assemblies maintained. Further, all Contractors are required to obtain fire-smoke or penetration permits prior to beginning any project that requires a penetration of fire rated or smoke rated walls.

END OF STANDARD

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