

CHAPTER 4

REPAIRS

SECTION 401 GENERAL

401.1 Scope. Repairs as described in Section 302 shall comply with the requirements of this chapter. Repairs to historic buildings shall comply with this chapter, except as modified in Chapter 10.

401.2 Permitted materials. Except as otherwise required herein, work shall be done using materials permitted by the applicable code for new construction or using materials *identical to or closely similar to previously approved existing materials* such that no hazard to life, health or property is created.

401.3 Conformance. The work shall not make the building less conforming to the building, plumbing, mechanical, electrical or fire codes of the jurisdiction, or to alternative materials, design and methods of construction, or any previously approved plans, modifications, alternative methods, or compliance alternatives, than it was before the repair was undertaken.

401.4 Flood hazard areas. In flood hazard areas, improvements, *if allowed by the Dallas Development Code*, shall require that the building comply with *Article V, "Flood Plain and Escarpment Zone Regulations," of the Dallas Development Code*.

SECTION 402 SPECIAL USE AND OCCUPANCY

402.1 General. Repair of buildings classified as special use or occupancy as described in the *Dallas Building Code* shall comply with the requirements of this chapter.

SECTION 403 BUILDING ELEMENTS AND MATERIALS

403.1 Hazardous materials. Hazardous materials no longer permitted, such as asbestos and lead-based paint, shall not be used.

403.2 Glazing in hazardous locations. Replacement glazing in hazardous locations *as defined in the Dallas Building Code* shall comply with the safety glazing requirements of *Section 2406 of the Dallas Building Code* or *Dallas One- and Two-Family Dwelling Code* as applicable.

Exception: Glass block walls; louvered windows; *textured glass; decorative, leaded, curved and structural pigmented glass; beveled glass* and jalousies *may be repaired with like materials*.

403.3 Reroofing. *The installation or replacement of wood shingle or wood shake roofs must be required for new installations.*

SECTION 404 FIRE PROTECTION

404.1 General. Repairs shall be done in a manner that maintains the level of *existing required* fire protection.

SECTION 405 MEANS OF EGRESS

405.1 General. Repairs shall be done in a manner that maintains the *previously approved existing* level of protection provided for the means of egress and *maintains the means of egress during the repair process. Alternative means of egress may be required during repairs to maintain the existing egress capacity.*

SECTION 406 ACCESSIBILITY

406.1 General. Repairs shall be done in a manner that maintains the level of *existing* accessibility.

SECTION 407 STRUCTURAL RESERVED

SECTION 408 ELECTRICAL

408.1 Material. Existing electrical wiring and equipment undergoing repair shall be allowed to be repaired and replaced with like material.

Exceptions:

1. Replacement of electrical receptacles shall comply with the applicable requirements of *Article 210-7-(d)* of NFPA 70.
2. Plug fuses of the Edison-base type shall be used for replacements only where there is no evidence of over fusing or tampering per applicable requirements of *Article 240-51-(b)* of NFPA 70.
3. For replacement of nongrounding-type receptacles with grounding-type receptacles and for branch circuits that do not have an equipment grounding conductor in the branch circuitry, the grounding conductor of a grounding-type receptacle outlet shall be permitted to be grounded to any accessible point on the grounding electrode system, or to any accessible point on the grounding electrode conductor in accordance with *Article 250-130-(c)* of NFPA 70.

REPAIRS

4. Non- "hospital grade" receptacles in patient bed locations of Group I-2 shall be replaced with "hospital grade" receptacles, as required by NFPA 99 and Article 517 of NFPA 70.
5. Frames of electrical ranges, wall-mounted ovens, counter-mounted cooking units, clothes dryers, and outlet or junction boxes that are part of the existing branch circuit for these appliances shall be permitted to be grounded to the grounded circuit conductor in accordance with Article 250-140 of NFPA 70.

rates and quantities for all replaced water closets shall be 1.6 gallons (6 L) per flushing cycle.

Exception: Blowout-design closets.

SECTION 409 MECHANICAL

409.1 General. Existing mechanical systems undergoing repair shall comply with Section 401.1 and the scoping provisions of Chapter 1 where applicable.

[P] SECTION 410 PLUMBING

410.1 Materials. The following plumbing materials and supplies shall not be used:

1. Sheet and tubular copper and brass trap and tailpiece fittings less than the minimum wall thickness of .027 inch (0.69 mm).
2. Solder having more than 0.2-percent lead in the repair of potable water systems.
3. Water closets having a concealed trap seal or an unventilated space or having walls that are not thoroughly washed at each discharge in accordance with ASME A112.19.2M.
4. The following types of joints shall be prohibited:
 - 4.1. Cement or concrete joints.
 - 4.2. Mastic or hot-pour bituminous joints.
 - 4.3. Joints made with fittings not approved for the specific installation.
 - 4.4. Joints between different diameter pipes made with elastomeric rolling O-rings.
 - 4.5. Solvent-cement joints between different types of plastic pipe.
 - 4.6. Saddle-type fittings.
5. The following types of traps are prohibited:
 - 5.1. Traps that depend on moving parts to maintain the seal.
 - 5.2. Bell traps.
 - 5.3. Crown-vented traps.
 - 5.4. Traps not integral with a fixture and that depend on interior partitions for the seal, except those traps constructed of an approved material that is resistant to corrosion and degradation.

410.2 Water closet replacement. When any water closet is replaced, the replacement water closet shall comply with the *Dallas Plumbing Code*. The maximum water consumption flow