

## PROPOSED CODE CHANGES

As the result of a thorough review of current City of Dallas codes and ordinances, 56 code and ordinance changes are proposed. The changes developed subsequent to this review are aimed at providing an improved level of safety through the increased use of automatic sprinklers, while minimizing the financial impact of such a requirement upon the community by eliminating or minimizing overly redundant requirements.

Of the 56 code changes, 48 are proposed to the Dallas Building Code, 6 are proposed to the Dallas Fire Code and 2 are proposed to the Waterworks Ordinances. The actual changes -- including existing code wording, proposed new wording and deleted wording -- are presented in Appendix A in succession by numerical code section.

Each of the proposed code changes can be classified into one of two basic types. The first type of code change concerns those changes which mandate automatic sprinkler installations. These changes are few in number but wide in scope. The second type of change is that which eliminates, reduces or modifies other fire protection or life safety requirements in lieu of mandatory automatic sprinklers. These eliminations, reductions and modifications will help off-set the cost of mandatory sprinkler protection.

The identification and development of the proposed code changes was dependent upon several concerns and considerations. Understanding the development of codes was important in order to realize how current requirements came to exist and how they interface with other code requirements. A knowledge of fire department operations was important in evaluating the impact that code requirements have on effective and safe fire fighting. Understanding the performance and application of automatic sprinklers is essential since sprinklers become the premise for the reduction, elimination and modification of some current code requirements. An understanding of the interrelation of building fire safety features is most important to assure that code requirements provide fire safety redundancy. Coupling the above considerations with supportive technical information, requirements of other recognized codes and standards, fire experience data, along with experience and engineering judgment provides the basis for the proposed code changes.

The supporting rationale for the proposed code changes is discussed below with accompanying explanations of the code changes. The following text does not necessarily represent an exhaustive critical analysis of any particular code section or topic, but is intended to provide the supportive reasoning and technical basis behind the proposed changes. Certain issues involved in the proposed code changes have themselves been the subject of intensive studies and analyses.

## BUILDING CODE CHANGES

### Subchapter 5

Subchapter 5 of the Dallas Building Code addresses general requirements for the various occupancies -- hospitals, offices, dwellings, factories, schools, restaurants, etc. -- which are categorized in the code. Among the general requirements are limitations on the allowable height and floor size (area) of a building, the degree of fire resistance required for structural members of a building, and requirements for buildings that house more than one occupancy.

The first code change, B-1, allows a doubling of the area for a minor accessory use in a building. Code Section 503 allows occupancies which do not occupy a large floor area to be considered accessory to the major occupancy of the building without subjecting the building to a more stringent area limitation requirement or requiring a fire-resistive separation between the occupancies. Currently, the code permits occupancies to be considered accessory use for up to 10 percent of the area of the floor. With the provision of automatic sprinkler protection, the proposed change will permit accessory uses up to 20 percent of a floor area. Regardless of the provision of automatic sprinklers, the basic area permitted for accessory use will still be limited to the basic areas found in Table 5-C of the Dallas Building Code. The additional risk introduced by allowing greater area for accessory use will be compensated for by the provision of automatic sprinkler systems. The current provision allowing 10 percent is essentially founded on a subjective basis. Since most codes allow increases in the total allowable building area of up to three times the basic area, a 100 percent increase in the allowed accessory use is consistent with currently accepted fire protection practice.

Proposed code changes B-4, B-5, B-6, B-7 and B-8 address the topic of maximum allowable building heights and areas. The Dallas Building Code, as other building codes,

