

**STANDARD FOR  
MULTI-DWELLING UNIT (MDU)  
OPTICAL FIBER CABLE**

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## PART 1

### INTRODUCTION

#### 1.1 Scope

##### 1.1.1 Products

Multi Dwelling Unit (MDU) cables covered by this standard include two classes of cables using single mode fiber. The first class includes cables used for distribution and delivery of optical fiber from a demarcation point starting at a conventional optical fiber cable, optical fiber splitter or active optical device through an aesthetic duct or less rigorous routing path. This class of cable may consist of an indoor-only rated cable, the Compact Drop or Small Form Factor Compact Drop. The second class of cable is defined to be more rugged and is described as cables that usually terminate at the customer electronics, or Optical Network Terminal (ONT). The rugged cable class may be stapled, routed around corners under tension, and coiled in a tight diameter. Examples include the Rugged Indoor Drop or Indoor/Outdoor Rugged Drop. See clause 1.4 for a more detailed definition of these cable types.

Fiber mechanical reliability requires that a cable classified as Rugged shall meet the enhanced mechanical reliability requirements set forth in this document.

Cables containing Multimode fibers are not covered by this standard. MDU cables using Multimode fibers should follow the intent herein using optical limits given by ICEA 596 where appropriate.

##### 1.1.2 Applications Space

All designs covered by this Standard are intended for operation under normal conditions found in the communications user's premises; the indoor/outdoor designs may also be used in a limited outdoor environment, such as attached to the outside of an MDU. These products normally convey communications signals (voice, video, and data) from point to point or point to multi point. These cables are intended for use from a local distribution point on or within a building to single or multiple units throughout a building. Products covered by this Standard may be factory terminated with connectors or splicing modules.

##### 1.1.3 Temperature Ranges

The normal temperature ranges for cables covered by this Standard are listed in Table 1-1: