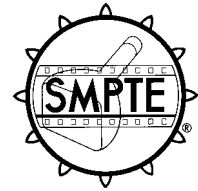


**SMPTE STANDARD****ANSI/SMPTE 26M-1995**Revision of  
ANSI/SMPTE 26M-1989

# for Video Recording — 1-in Helical-Scan Recorders — Raw Stock for Reference Tapes



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**1 Scope**

This standard specifies dimensions for the width, thickness, and width deviation of raw tape stock used to record reference tapes for 1-in helical-scan video tape recorders. Conditions before testing and testing environment are also specified.

**2 Normative reference**

The following standard contains provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below:

ANSI/ASTM D638M-91, Test Method for Tensile Properties of Plastics

**3 Conditioning for testing and recording**

**3.1** Tests, measurements, and recordings made on the raw tape stock to check the requirements of this standard shall be made under the following conditions:

Temperature:	23°C ± 1°C
Relative humidity:	(50 ± 2)%
Barometric pressure:	86 kPa to 106 kPa

**3.2** The raw tape stock shall be stabilized at the above conditions for 24 hours, rewind on a reel at a tape tension of 2.0 N ± 0.5 N, and kept at the same conditions for another 24 hours.

**4 Dimensions****4.1 Tape stock**

The dimensions of the tape stock for recording reference tapes shall be as specified below:

Dimensions	Millimeters
Width:	25.350 ± 0.025
Thickness:	0.027 to 0.030
Maximum rate of width change:	less than 0.015 over a length of 250

**4.2 Longitudinal dimensional change**

The longitudinal dimensional change of the raw tape stock kept under the following conditions for 48 hours shall be less than 0.03%.

Temperature:	45°C ± 1°C
Relative humidity:	(85 ± 2)%
Tape tension:	2.0 N ± 0.5 N

**4.3 Modulus of elasticity**

The longitudinal modulus of elasticity shall be measured in accordance with ANSI/ASTM D638M-91, and shall meet the following specifications:

	N/mm <sup>2</sup>	lb/in <sup>2</sup>
Minimum	2.9 × 10 <sup>3</sup>	0.43 × 10 <sup>6</sup>
Maximum	7.4 × 10 <sup>3</sup>	1.07 × 10 <sup>6</sup>

**4.4 Poisson's ratio**

Poisson's ratio shall be 0.4 nominal.

CAUTION NOTICE: This Standard may be revised or withdrawn at any time. The procedures of the Standard Developer require that action be taken to reaffirm, revise, or withdraw this standard no later than five years from the date of publication. Purchasers of standards may receive current information on all standards by calling or writing the Standard Developer. Printed in USA.

NOTE – In addition to the parameters specified in this standard, there are other parameters such as coating and frictional characteristics that affect the operation

of the tape. Manufacturers of reference tape should take these parameters into consideration.