



www.multifeutre.com

# F-5 Specification and Uses

These data were obtained by ASTM D-461 Test Methods, ASTM D-2475 Standards, and NTA Wool Felt Specifications.



Commercial Standard Grade	12R1
SAE Number	F-5
NTA Number	26R1
<b>GENERAL PROPERTIES</b>	
Wool Content (fiber basis)	min. 95%
Density (1")	12.24 lbs/sq yd
Standard Thickness Range	1/8" to 1"
Standard Width	60"
Color	White
<b>PHYSICAL PROPERTIES</b>	
Specific Gravity	26%
Therm. Cond. (70F)	0.30 btu / hr / sq ft / °F / in.
Thermal Expansion	0
Air Perm (1/16")	20-50 cfm/sq ft/0.5" H2O
Liquid Absorption by volume	>250% by weight (1.0 sp gr) 80
Capillarity (wicking height, 575 SSU, 70F)	3.00
Coefficient of Friction (1)	0.37
** Vibration Absorption (2) static load bearing cap/unit area Dynamic stress endurance	Medium High
Noise Reduction Coef (1")	0.58
<b>MECHANICAL PROPERTIES</b>	
Tensile Strength (min)	400 psi
Elongation (100 psi)	16 %
Mullen Bursting Strength (1/8")	175 psi
Split Resistance (min)	18 lb/2" width
Hardness Range	20-30 Shore A
Compressibility (10% defl)	6 psi
Recovery (within 1 min after 10% defl)	99%
Abrasion Resistance (3)	Good
<b>CHEMICAL AND ENVIRONMENTAL PROPERTIES</b>	
Effect of Sunlight and Oxidation	None
Solvent Resistance and Stability in Oil	Excellent
Acid Resistance, dilute Concentrated	Excellent Good-fair
Alkali Resistance, dilute Concentrated	Fair Low
Temperature Range	-80 to +200°F
<b>TYPICAL USES</b>	
Lubricators, wipers, shock dampeners and where durable resilient felt is required.	

# F-5 Density and Thickness



S.A.E. Specification Number	F-5
A.S.T.M. Federal and Felt Association Type and Grade Number	12R1
Density Percent Specific Gravity	26.2
Actual (1) Wool Content (Min.) Percent	95
Carbon Tetrachloride Soluble (Max.) Percent	2.5
Water Soluble (Max.) Percent	2.5
Carbon Tetrachloride & Water Soluble (Max.) Percent	3.0
Ash (Max.) Percent	2.0
Tensile Strength (Min.) PSI	400
Splitting Resistance (Min.) Lbs. Per 2" Width	18
Trade Designation	Extra Firm Pad
Color	Gray
Standard Width Inches	72



THICKNESS		WEIGHT	
Nominal (inch)	Limits (inch)	Nominal (lbs/sq. yd.)	Limits (lbs/sq. yd.)
1/8	0.111 - 0.139	1.53	1.45 - 1.61
3/16	0.172 - 0.204	2.29	2.17 - 2.41
1/4	0.232 - 0.268	3.06	2.90 - 3.22
5/16	0.293 - 0.333	3.82	3.62 - 4.02
3/8	0.353 - 0.397	4.59	4.35 - 4.83
1/2	0.474 - 0.526	6.12	5.80 - 6.44
5/8	0.595 - 0.655	7.65	7.25 - 8.05
3/4	0.716 - 0.784	9.18	8.70 - 9.66
7/8	0.837 - 0.913	10.71	10.15 - 11.27
1	0.958 - 1.042	12.24	11.60 - 12.88