

Laboratory Report

ASTM D 6083-97a

Standard Specification for Liquid Applied Acrylic Coating Used in Roofing

Physical Property	ASTM Test	Requirement	Acronal NX 3587	Competitor
I Colloidal properties				
Viscosity (KU)	D 562	85-141	99	103
Viscosity (Brookfield LVT #4 @ 6 rpm)	D 2196	12-85 poise		
Volume solids (% calculated)	D 2697	>50		
Weight solids (%)	D 1644	>60	62.7	70.6
II Mechanical properties of the film				
A. After 14 days drying in standard lab conditions				
Tensile strength ¹ @ 73°F	D 2370	>=200 lb/in ²	413	177
Elongation ¹ at break @ 73°F	D 2370	>=100 %	182	454
B. After 1000 hours aging in a Xenon Arc Weatherometer				
Elongation ¹ at break @ 73°F	D 2370	>=100 %	166	303
Flexibility @ -15 °F (1/2" mandrel)	D 522	Pass	Cracked	Cracked
Accelerated weathering (cracking & Checking)	D 4798	Nil	Nil	Nil
III Other properties of the film				
Wet Adhesion ² -Polyurethane foam	C 794/ D 903	>2 lb/in	4.0	1.09
Wet Adhesion ² -Galvanized	C 794/ D 903	>2 lb/in	4.6	4.4
Tear Resistance ¹ (Die C)	D 624	>60 lbf/in	91	116
Permeance ² - inverted	D 1653A	<50 perms	19.7	15.2
Average dry film thickness (inches)			0.020 in.	0.020 in.
Water swelling ¹	D 471	<20 weight %	7.7	6.1
Fungi resistance	G 21	Zero		
Dry Adhesion ² -Polyurethane foam	C 794/ D 903	NR	6.2	0.25
Dry Adhesion ² -Galvanized	C 794/ D 903	NR	5.9	3.6

NT = Not tested

NR = Not required

¹ Only three specimens tested

² Only two specimens tested.