

BRUSHES

INTEGRITY XB

20-48" (508-1219mm)

Compression Testing

This was done using the JJ Lloyd LRX102175 Universal Testing Machine, Calibration Certificate No. 20090472 under the control of "Nexygen" software.

The specimens were compressed to a limit of 20mm deflection on a single bristle and the full brush face. This was done due to initial tests showing the specimen bristles passing 45° at this deflection. All bristles were loaded at approximately 25% of the bristle.

The chart below displays an attempt to cause failure in the brush using 70% of the bristle to load and deflecting to a maximum 30mm.

Compress to Limit, Brief Report

Date	Time	User	Sample	Sample Information	Batch Reference	Sample Reference
20/07/2011	10:40:55	u00238	TRUE	Sample Information	Small Tri	Thin whole destruct
20/07/2011	10:46:26	u00238	TRUE	Sample Information	Small Tri	Thin whole destruct

Speed	Datum Speed	Load at Limit	Deflection on Limit	Work to Limit	Maximum Load
50.000	1.0000 mm/...	516.83 N	20.000 mm	5.2160 J	517.45 N
50.000	1.0000 mm/...	4798.9 N	30.000 mm	20.494 J	4825.7 N

Deflection at Maximum Load	Work to Maximum Load	Stiffness
20.014 mm	5.2234 J	43124.0
30.016 mm	20.570 J	182470

Urethane Block to Hold Bristles

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Density (73°F)	1180	kg/m ³	ASTM D 792
Mechanical Properties			
ISO Data			
Abrasion resistance	40	mm ³	ISO 4649
ASTM Data			
Tensile Strength	35	MPa	ASTM D 638
Elongation at Break	420	%	ASTM D 638
Flexural Modulus	230	MPa	ASTM D 790
Modulus at 100% Elongation	20	MPa	ASTM D 412
Modulus at 300% Elongation	28	MPa	ASTM D 412
Shore D hardness	62	-	ASTM D 2240
Tear Strength	155	kN/m	ASTM D 624
Izod Impact notched (Low Temperature)	0.125	kJ/m	ASTM D 256
Temperature	-20	°C	ASTM D 256

EPOXY Resin Adhesive

Typical Performance Characteristics

Color Mixed:	Purple
Cured density (SG):	1.16
Temperature:	-50°C to +65°C depending on conditions of use
Water:	Not intended for constant immersion
Oil & Petrol:	Good Resistance
Chemicals:	Good Resistance
Sandability:	Sandable when set. Please wear dust mask.
Paintability:	Good, but confirm by test. Fine sanding helps.