

How to Specify Velstone

Dimensions

Velstone is available in maximum width of 915mm in standard thicknesses of 13mm and 25mm.

Specify minimum 13mm sheet thickness for all horizontal applications.

Specify cost saving 25mm thick Velstone sheets where straight length worktops are required, e.g. vanity tops or hot/cold servery counters.

For vertical applications 13mm Velstone sheets are to be used.

Colours

Please include the Velstone colour reference number and colour name. Please check Velstone web-site for latest range of colours.

Additional Products

Two pieces/sheets of Velstone should only be joint using corresponding Velstone adhesive:

Test Data

The material should meet the following Test specifications.

Type / Description	Test Standard	Observation / Results
Test For Measuring The Specific Optical Density Of Smoke Emitted By The Combustion Of Pyrolysis Of Solid Materials	NFX 10 – 702: APRIL 1986	VOF4 Flaming Mode 1 st Specimen = 44.52 VOF4 Non-Flaming Mode 1 st Specimen = 2.15 VOF4 Flaming Mode Average Of Three Results = 34.80
Analysis Of Pyrolysis And Combustion Gases Tube Furnace Method	NFX 70 – 100: JUNE 1986	C.I.T value 9.77
F Classification In Accordance With NF F-16-101 Railway Rolling-Stock Fire Behaviour Choice Of Materials	NF F-16-101	The SI value is 9.21 Classified as F1
Determination Of “M & F” Rating in Accordance with NF16-101	NFX 70 NFX 70 - 100 NFP 92-501	1. NFX 70 – 702 “Smoke Emission Test” VOS ₄ value in Non-Flaming Mode : 1 st Specimen = 2.15 VOS ₄ value in Flaming Mode : 1 st Specimen = 44.52 Dm(Max) Flaming Mode average of three results = 316.35 VOS ₄ Flaming Mode average of three results = 34.80 2. NFX 70 – 100 “Toxicity Test” C.I.T = 9.99 Classified as F1. 3. NFP 92-501 “Epiradiateur” M rating Of M2
Epiradiateur Test NFP 92-501	NFP 92-501	Classified as M2
The Classification Of		Classified as M2

Materials Of Construction And Decoration to reaction to fire		
Method of Test For Fire Propagation For Products	BS 476: PART 6: 1989	Fire Propagation Index, 1 = 5.3
Methods For Classification Of The Surface Spread Of Flame Of Products	BS 476: PART 7: 1987	Classified as Class 1
Fire Hazard Test To NES 713 (Issue 3) As Amended November 1991 Determination Of The Toxicity Index Of The Products Of Combustion from small Specimens of Materials	NES 713 (Issue 3)	Toxicity Index = 0.2
BS 6853 Annex D.8.6 "3 Metre Cube Smoke Emission – Flooring Tests"	BS 6853: 1999 Annex D.8.6	6mm Velstone : FIR/01148/1 Result: $A_0 = 134 \text{ m}^2/\text{m}^2$ (mean result of two tests, +/- 5.3%) 13mm Velstone : FIR/01148/2 Result: $A_0 = 250 \text{ m}^2/\text{m}^2$ (mean result of two tests, +/- 6.8%) No Flaming Results was seen outside the ignition source in any of the tests.
"3 Metre Cube Smoke Emission – Flooring Tests" 13mm thick Velstone Solid Surface Material bonded to 18mm thick FR Grade MDF.	BS 6853: 1999 Annex D.8.6	6mm Velstone : FIR/01148/1 Test Reference: FIR/01148/1A: $\%T_{(\text{min})}$ =23.7% @40mins FIR/01148/1B: $\%T_{(\text{min})}$ =27.4% @40mins FIR/01148/1A: $A_0 = 141 \text{ M}^2/\text{M}^2$ FIR/01148/1B $A_0 = 127 \text{ M}^2/\text{M}^2$ Result: $A_0 = 134 \text{ m}^2/\text{m}^2$ (mean result of two tests, +/- 5.3%) No Flaming Results was seen outside the ignition source in any of the tests.
"3 Metre Cube Smoke Emission – Flooring Tests" 6mm thick Velstone Solid Surface Material bonded to Zintec Steel	BS 6853: 1999 Annex D.8.6	13mm Velstone : FIR/01148/2 Test Reference: FIR/01148/2A: $\%T_{(\text{min})}$ =6.5% @40mins FIR/01148/2B: $\%T_{(\text{min})}$ =9.2% @40mins FIR/01148/2A: $A_0 = 267 \text{ M}^2/\text{M}^2$ FIR/01148/2B $A_0 = 233 \text{ M}^2/\text{M}^2$ Result: $A_0 = 250 \text{ m}^2/\text{m}^2$ (mean result of two tests, +/- 6.8%) No Flaming Results was seen outside the ignition source in any of the tests.
3 Metre Cube Smoke Emission – Flooring Tests" On 12mm thick Velstone	BS 6853: 1987 Appendix B.9.3	12mm Thick Velstone : FT98/952/1 Sample $A_0(\text{On})$ $A_0(\text{Off})$ (m^2/m^2 burn area) (m^2/m^2 burn area) FT98/952/1a 8.10 12.61 FT98/952/1b 8.28 12.66 Mean 8.2 12.6
Cigarette Burn Test	NEMA LD5-3.08	PASS
Flame Spread Test	ASTM Designation E-84	Class 1
Flame Spread		Flame Spread :25

Classification and Smoke Density Developed		NFPA CLASS : A UBC CLASS : 1 Smoke Density : 130
Ballistic Tests Carried Out ON 6,13 And 19mm Velstone In Accordance with Guidelines And to The Methods Laid Down In BS 5051: PART 1:1988 Method For Classification Of The Ballistic Capabilities Of Products	BS 5051: PART 1: 1988	Type One Passed GO & G1 Type two Passed G2 Passed S86 Type three Passed G2 Passed S86
Thermal Conductivity Of Polymer And Aluminium Trihydrate		Thermal Conductivity Result Mean hot face temperature /0 C 77.0 Mean cold face temperature /0 C 62.9 Mean test temperature /0 C 70.0 Thermal Conductivity /(W/m.K) 0.683)
Specific Gravity	ASTM D792-91	160
Barcoal Hardness	D785-89	89
Tensile Strength, PSI	ASTM D638-91	5060
Elongation %	ASTM D638-91	0.6
Modulus Of Elastic	ASTM D638-91	919,000
Abrasion Resist	ASTM C501-84	0.27
Boiling Water Resistance	NEMA LD3-3.05	No Effect
High Temperature Resistance	NEMA LD3-3.06	No Effect
Izod Impact, Ft-Lb/In	ASTM D256-90	0.31
Water Absorption, Weight %	ASTM D570-81	0.04
Ball Impact, Inch Drop	NEMA LD3-3.03	>120
Test to assess the comparative durability of the surface finish 1. Scrape:sp 2. Impact 3. Condensation 4. Water Ingress 5. Flooding 6. Large Ball Impact 7. Ease Of Renovation	BS 3202 Part 2	5 5 No visible Deterioration No effect No effect 1 A) Light Stains – Stains easily removed B) Heavy Stains – Stains easily removed C) Nicks and Cuts (light) – Cuts removed D) Nicks & Cuts (deep) – Cuts removed

Fabrication & Installation

Velstone should be fabricated and installed as per manufacturer's recommended guidelines. A copy of the fabrication manual is available on request.

Warranty

Velstone offers a 10 year limited warranty with all its products. Please refer to the warranty terms and conditions.