

# Altro Whiterock™ hygienic wall systems

Data sheet 'EU' grade - extruded W103/104,
Altro Whiterock Standard White

Economical standard grade for general purpose use. Also suitable where sheet may come into contact with food.

#### **Description**

Extruded semi-rigid PVCu sheet.

Colour: White Surface finish: Satin Thickness: 2.5mm

Size: 2500 x 1220mm (W103)

3000 x 1220mm (W104)

Weight: 3.6 kg/m²
Maximum service temp: 60°C

Altro Whiterock W103/104 PVCu extruded sheet is supplied with a protective film on its face which can be left in place until the room is ready for use.

This also helps to protect the surface from dust while other trades are in the area. It is ideal for applications requiring a hygienic easy-to-clean, almost maintenance free wall finish, which conforms to UK and European hygiene requirements.

This is the most economical standard grade which can be used for the majority of installations.

#### **Fixing**

The sheets can be fixed directly to most dry substrates depending on its surface suitability, using one of the following methods:

- 1. AltroFix™ W139 fully bonded system
- 2. AltroFix™ W157 fully bonded system

## **Cutting**

Cutting to be carried out using a fine tooth circular saw with TCT cutting blades and pressure guide, fine tooth blade jigsaw, a fine tooth handsaw, a high speed TCT router.

# **Jointing**

- see relevant detailed drawings
- A high impact extruded PVCu 'H' joint trim (available in two part or single part for use in secure units), incorporating a watertight seal at the mouth of the joint, which is unique to Altro.
- Colour coordinated Altro Whiterock FlexiJoint™. (Not for use in secure units).
- 3. Hot welded joint colour coordinated w/rod.
- 4. Silicone sealant 3mm joint.
- 5. A powder coated aluminium "H" joint used for extra impact or heat resistance.

#### Internal / external corners

- see relevant detailed drawings, available on the Altro Website: www.altro.com

Altro Whiterock is normally thermoformed on-site, internal and external corners including window and door reveals are neatly clad, omitting the need for corner trims. However, profiles are available for these junctions if the need arises. Vulnerable external corners are usually over-clad with stainless steel corner protectors, to a height of 1200mm.

#### Cleaning

Regular cleaning using a soft cloth and a suitably diluted mild detergent is all that is normally required. Stubborn marks can be removed with Altro Cleaner A859 or nonabrasive domestic type cream bath cleaner.

Do not use abrasive pads or wire wool. Do not clean above 60°C. Cleaning cards are available on request.

#### **Chemical resistance**

Resistant to a wide range of chemicals, specific details on request.

#### **Availability**

Ex-stock.

### **Storage & conditioning (on-site)**

Sheets should be stored flat, fully supported and left for 24 hours to attain the ambient room temperature prior to installation (min 14°C).

#### **Limitations of use**

Altro Whiterock W103/104 has a maximum working temperature of 60°C. For temperatures above this use stainless steel. Stainless steel must be used for all open flame areas (available cut to size) must be extended to min 300 mm past heatsource. If a layout showing the position of equipment can be supplied, we will provide specific advice as to the best combination of materials to use.

#### **Typical applications**

- · commercial kitchens
- laboratories
- pharmaceutical areas
- food manufacturing areas
- shower / toilet / changing room areas

Our Technical Services Department is available for advice on 01462 707600.

#### **Technical data**

Thickness 2.5 mm  Size 2500 mm x 1220 mm 3000 mm x 1220 mm 3000 mm x 1220 mm  Weight 3600 g/m²  Density ISO 1183 1.44 g/cm³  Maximum service temperature 60°C  Hardness (Shore D) ISO 868 76  Fire resistance EN 13501-1 B- s3, d0 B5 476 pt 6 Class 0 (when fixed to a non-combustible substrate) B5 476 pt 7 Class 1  Notched Impact resistance ISO 179/1ea 9.5 KJ/m²  Impact resistance ISO 179/1ea 9.5 KJ/m²  Impact resistance ISO 179/1eu +20°C without breakage 0°C without breakage -20°C without breakage Flexural strength ISO 178 70 MPa  Tensile strength ISO 527 52 MPa  E-modulus of elasticity ISO 527 2950 MPa  Compressive strength DIN 53421 68 N/mm²  Vicat softening point VST/B ISO 306 73°C  Expansion coefficient DIN 53752 0.07 mm/mK Heat distortion temperature ISO 75-2 60 °C Water Absorption ISO 62 ≤ 0.1 % Thermal Conductivity EN 12524 0.17 W/mK "U" value (bonded to 100mm block wall) DIN 52612 1.8 W/m² °C Moisture Vapour Transmission rate (MVTR) ASTM E96 3.82 x 105GN.S/Kg.m	Property	Standard	Value
Size   2500 mm x 1220 mm   3000 mm x 1220 m	Surface finish		Satin
South   Sou	Thickness		2.5 mm
Weight         3600 g/m²           Density         ISO 1183         1.44 g/cm³           Maximum service temperature         60°C           Hardness (Shore D)         ISO 868         76           Fire resistance         EN 13501-1         B- s3, d0           BS 476 pt 6         Class 0 (when fixed to a non-combustible substrate)           BS 476 pt 7         Class 1           Notched Impact resistance         ISO 179/1ea         9.5 KJ/m²           Impact resistance         ISO 179/1eU         +20°C without breakage           0°C without breakage         0°C without breakage           1SO 178         70 MPa           Flexural strength         ISO 527         52 MPa           E-modulus of elasticity         ISO 527         2950 MPa           Compressive strength         DIN 53421         68 N/mm²           Vicat softening point VST/B         ISO 306         73°C           Expansion coefficient         DIN 53752         0.07 mm/mK           Heat distortion temperature         ISO 75-2         60 °C           Water Absorption         ISO 62         < 0.1%	Size		2500 mm x 1220 mm
Density   ISO 1183   1.44 g/cm³			3000 mm x 1220 mm
Maximum service temperature         60°C           Hardness (Shore D)         ISO 868         76           Fire resistance         EN 13501-1 B- s3, d0         Class 0 (when fixed to a non-combustible substrate)           BS 476 pt 7 Class 1         Class 1           Notched Impact resistance         ISO 179/1ea         9.5 KJ/m²           Impact resistance         ISO 179/1eU         +20°C without breakage 0°C without breakage 0°C without breakage 150 MPa           Flexural strength         ISO 178         70 MPa           Tensile strength         ISO 527         52 MPa           E-modulus of elasticity         ISO 527         2950 MPa           Compressive strength         DIN 53421         68 N/mm²           Vicat softening point VST/B         ISO 306         73°C           Expansion coefficient         DIN 53752         0.07 mm/mK           Heat distortion temperature         ISO 75-2         60°C           Water Absorption         ISO 62         ≤ 0.1%           Thermal Conductivity         EN 12524         0.17 W/mK           "U" value (bonded to 100mm block wall)         DIN 52612         1.8 W/m² °C           Moisture Vapour Transmission rate (MVTR)         ASTM E96         3.82 x 105GN.S/Kg.m	Weight		3600 g/m <sup>2</sup>
Hardness (Shore D)    ISO 868   76	Density	ISO 1183	1.44 g/cm <sup>3</sup>
EN 13501-1   B- s3, d0     BS 476 pt 6   Class 0 (when fixed to a non-combustible substrate)     BS 476 pt 7   Class 1     Notched Impact resistance   ISO 179/1ea   9.5 KJ/m²     Impact resistance   ISO 179/1eu   +20°C without breakage     0°C without breakage     -20°C without breakage	Maximum service temperature		60°C
BS 476 pt 6   Class 1	Hardness (Shore D)	ISO 868	76
BS 476 pt 7   Class 1	Fire resistance	EN 13501-1	B- s3, d0
Notched Impact resistance		BS 476 pt 6	Class 0 (when fixed to a non-combustible substrate)
ISO 179/1eU		BS 476 pt 7	Class 1
0°C without breakage           -20°C without breakage           Flexural strength         ISO 178         70 MPa           Tensile strength         ISO 527         52 MPa           E-modulus of elasticity         ISO 527         2950 MPa           Compressive strength         DIN 53421         68 N/mm²           Vicat softening point VST/B         ISO 306         73°C           Expansion coefficient         DIN 53752         0.07 mm/mK           Heat distortion temperature         ISO 75-2         60 °C           Water Absorption         ISO 62         ≤ 0.1%           Thermal Conductivity         EN 12524         0.17 W/mK           "U" value (bonded to 100mm block wall)         DIN 52612         1.8 W/m² °C           Moisture Vapour Transmission rate (MVTR)         ASTM E96         ≤ 0.12g/m²/24hrs           Water vapour resistivity         ASTM E96         3.82 x 105GN.S/Kg.m	Notched Impact resistance	ISO 179/1ea	9.5 KJ/m²
Flexural strength   ISO 178   70 MPa	Impact resistance	ISO 179/1eU	+20°C without breakage
Flexural strength  ISO 178  70 MPa  Tensile strength  ISO 527  52 MPa  E-modulus of elasticity  ISO 527  E-modulus of elasticity  ISO 527  DIN 53421  68 N/mm²  Vicat softening point VST/B  ISO 306  T3°C  Expansion coefficient  DIN 53752  DIN 53752  0.07 mm/mK  Heat distortion temperature  ISO 75-2  Water Absorption  ISO 62  EN 12524  0.17 W/mK  "U" value (bonded to 100mm block wall)  DIN 52612  Moisture Vapour Transmission rate (MVTR)  Water vapour resistivity  ASTM E96  3.82 x 105GN.S/Kg.m			0°C without breakage
Tensile strength         ISO 527         52 MPa           E-modulus of elasticity         ISO 527         2950 MPa           Compressive strength         DIN 53421         68 N/mm²           Vicat softening point VST/B         ISO 306         73°C           Expansion coefficient         DIN 53752         0.07 mm/mK           Heat distortion temperature         ISO 75-2         60 °C           Water Absorption         ISO 62         ≤ 0.1%           Thermal Conductivity         EN 12524         0.17 W/mK           "U" value (bonded to 100mm block wall)         DIN 52612         1.8 W/m² °C           Moisture Vapour Transmission rate (MVTR)         ASTM E96         ≤ 0.12g/m²/24hrs           Water vapour resistivity         ASTM E96         3.82 x 105GN.S/Kg.m			-20°C without breakage
E-modulus of elasticity  Compressive strength  DIN 53421  68 N/mm²  Vicat softening point VST/B  ISO 306  T3°C  Expansion coefficient  DIN 53752  0.07 mm/mK  Heat distortion temperature  ISO 75-2  Water Absorption  ISO 62  EN 12524  0.17 W/mK  "U" value (bonded to 100mm block wall)  DIN 52612  Moisture Vapour Transmission rate (MVTR)  Water vapour resistivity  ISO 527  2950 MPa  68 N/mm²  0.07 mm/mK  1SO 62  ≤ 0.17 W/mK  1SO 62  ≤ 0.18 W/m² °C  ASTM E96  3.82 x 105GN.S/Kg.m	Flexural strength	ISO 178	70 MPa
Compressive strength         DIN 53421         68 N/mm²           Vicat softening point VST/B         ISO 306         73 °C           Expansion coefficient         DIN 53752         0.07 mm/mK           Heat distortion temperature         ISO 75-2         60 °C           Water Absorption         ISO 62         ≤ 0.1%           Thermal Conductivity         EN 12524         0.17 W/mK           "U" value (bonded to 100mm block wall)         DIN 52612         1.8 W/m² °C           Moisture Vapour Transmission rate (MVTR)         ASTM E96         ≤ 0.12g/m²/24hrs           Water vapour resistivity         ASTM E96         3.82 x 105GN.S/Kg.m	Tensile strength	ISO 527	52 MPa
Vicat softening point VST/B         ISO 306         73°C           Expansion coefficient         DIN 53752         0.07 mm/mK           Heat distortion temperature         ISO 75-2         60 °C           Water Absorption         ISO 62         ≤ 0.1%           Thermal Conductivity         EN 12524         0.17 W/mK           "U" value (bonded to 100mm block wall)         DIN 52612         1.8 W/m² °C           Moisture Vapour Transmission rate (MVTR)         ASTM E96         ≤ 0.12g/m²/24hrs           Water vapour resistivity         ASTM E96         3.82 x 105GN.S/Kg.m	E-modulus of elasticity	ISO 527	2950 MPa
Expansion coefficient         DIN 53752         0.07 mm/mK           Heat distortion temperature         ISO 75-2         60 °C           Water Absorption         ISO 62         ≤ 0.1%           Thermal Conductivity         EN 12524         0.17 W/mK           "U" value (bonded to 100mm block wall)         DIN 52612         1.8 W/m² °C           Moisture Vapour Transmission rate (MVTR)         ASTM E96         ≤ 0.12g/m²/24hrs           Water vapour resistivity         ASTM E96         3.82 x 105GN.S/Kg.m	Compressive strength	DIN 53421	68 N/mm <sup>2</sup>
Heat distortion temperature         ISO 75-2         60 °C           Water Absorption         ISO 62         ≤ 0.1%           Thermal Conductivity         EN 12524         0.17 W/mK           "U" value (bonded to 100mm block wall)         DIN 52612         1.8 W/m² °C           Moisture Vapour Transmission rate (MVTR)         ASTM E96         ≤ 0.12g/m²/24hrs           Water vapour resistivity         ASTM E96         3.82 x 105GN.S/Kg.m	Vicat softening point VST/B	ISO 306	73°C
Water Absorption         ISO 62         ≤ 0.1%           Thermal Conductivity         EN 12524         0.17 W/mK           "U" value (bonded to 100mm block wall)         DIN 52612         1.8 W/m² °C           Moisture Vapour Transmission rate (MVTR)         ASTM E96         ≤ 0.12g/m²/24hrs           Water vapour resistivity         ASTM E96         3.82 x 105GN.S/Kg.m	Expansion coefficient	DIN 53752	0.07 mm/mK
Thermal Conductivity         EN 12524         0.17 W/mK           "U" value (bonded to 100mm block wall)         DIN 52612         1.8 W/m² °C           Moisture Vapour Transmission rate (MVTR)         ASTM E96         ≤ 0.12g/m²/24hrs           Water vapour resistivity         ASTM E96         3.82 x 105GN.S/Kg.m	Heat distortion temperature	ISO 75-2	60 °C
"U" value (bonded to 100mm block wall)       DIN 52612       1.8 W/m² °C         Moisture Vapour Transmission rate (MVTR)       ASTM E96       ≤ 0.12g/m²/24hrs         Water vapour resistivity       ASTM E96       3.82 x 105GN.S/Kg.m	Water Absorption	ISO 62	≤ 0.1%
Moisture Vapour Transmission rate (MVTR)       ASTM E96       ≤ 0.12g/m²/24hrs         Water vapour resistivity       ASTM E96       3.82 x 105GN.S/Kg.m	Thermal Conductivity	EN 12524	0.17 W/mK
Water vapour resistivity ASTM E96 3.82 x 105GN.S/Kg.m	"U" value (bonded to 100mm block wall)	DIN 52612	1.8 W/m <sup>2</sup> °C
	Moisture Vapour Transmission rate (MVTR)	ASTM E96	$\leq 0.12$ g/m <sup>2</sup> /24hrs
Light reflectance values (LRV) D65 artificial daylight 89	Water vapour resistivity	ASTM E96	3.82 x 105GN.S/Kg.m
	Light reflectance values (LRV)	D65 artificial daylight	89

# For further information or technical advice tel: 01462 707600

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