

Tyvek® StructureGuard – installation

NBS ref: Breather membrane, Rainscreen cladding: **H92 785**

Breather Membrane to EN 13859-2 shall be **Tyvek® StructureGuard** as manufactured by DuPont de Nemours (Luxembourg) Sàrl. Supplied to the merchant network by DuPont™ Building Innovations, Unit 29 Hither Green Estate, Clevedon, North Somerset. BS21 6XU. Tel: 01275 337660

Storage

Rolls of Tyvek® StructureGuard should be stored palletised or on their sides on a smooth clean surface, under cover and protected from direct sunlight.

General

Care should be taken when handling the membrane in order to prevent tears and punctures occurring. Any that do occur should be repaired with Tyvek® 2060B tape.

Application

Unroll Tyvek® StructureGuard horizontally over the face of the construction. Ensure maximum coverage by extending 100mm min below the sheathing, CP board or lowest structural timber/steel member.

Temporary fixing

Tyvek® Double-sided Tape may be used for short-term temporary fixing prior to the installation of external insulation, battens or cladding brackets. Care should be taken to limit the exposure period in such instances.

Fixing to cement bonded particle board (CBPB)

In most cases a Tyvek® membrane can be temporarily fixed to a CBPB with a good quality and sufficiently heavy duty stainless steel staple. These should be fixed at 500mm centres vertically and 1m centres horizontally. For air leakage purposes the staple penetration may need to be sealed with a patch of Tyvek® 2060B tape.

- Alternative fixing of Tyvek® StructureGuard can be achieved with a drill tip screw through the CBPB and into the metal framing. The head of the screw must have a low profile flat head to sit flush against the membrane. An EPDM rubber washer should sit between the screw head and the membrane for sealing purposes. Screw fixings should be spaced at a minimum 1m centres vertically at every stud position.

Fixing – to timber studs/sheathing

Fix Tyvek® StructureGuard with stainless steel staples or corrosion resistant nails. Fix at max 600mm centres horizontally and 300mm centres vertically. Fix membrane at max 150mm centres at joints and openings.

Fixing to insulation

Fix Tyvek® StructureGuard to rigid insulation with a proprietary expanding insulation fixing anchor. In cladding applications timber battens or metal brackets may also be used to fix the membrane.

Fixing to steelwork

Fix Tyvek® StructureGuard to steelwork with an appropriate fixing system such as a 25mm Steel Framing Screw with an EPDM rubber washer

Fixing – to masonry

Fix Tyvek® StructureGuard to masonry with an anchor fixing system or masonry nail and EPDM rubber washer.

Laps

All horizontal laps should be 100mm min. Vertical laps should be 150mm min.

External corners

Dress Tyvek® StructureGuard around external corners ensuring a return of 300mm min.

Window openings

Wrap Tyvek® StructureGuard into window/door openings and make good to corners with Tyvek® 2060B tape. For improved weather sealing around details use Tyvek® Flexwrap.

Continued.

Cavity barriers/trays/flashings

Dress Tyvek® StructureGuard over cavity barrier/tray/flashings ensuring a minimum lap of 100mm.

Floor junctions

Dress Tyvek® StructureGuard over intermediate floor zone ensuring a minimum lap of 100mm between sheets

Airtightness – sealing (optional)

Tyvek® StructureGuard has been tested for 'Resistance to penetration of air' in accordance with EN 12114 and achieved $<0.25 \text{ m}^3/\text{m}^2/\text{hr}$ at 50Pa. With all laps and penetrations sealed, Tyvek® StructureGuard will contribute to the overall airtightness of the building.

Seal the laps in Tyvek® StructureGuard with Tyvek® 2060B tape or Tyvek® Acrylic (double sided) Tape. Fixing penetrations can be sealed by applying Tyvek Butyl Tape to the substrate before the membrane is installed.

Compatibility: Where timber treatments are used care should be taken to ensure they are touch-dry before the installation of the Tyvek® membrane. Retrospective spray applied micro emulsions can also pose significant risk to polymer based materials such as Tyvek® StructureGuard. Masking the membrane against such preservative treatments should be considered.