

DuPont™ **Tyvek**® INSTALLATION GUIDELINES

DuPont™ Climate Systems: **Tyvek**® Enercor® Wall and DuPont™ AirGuard®

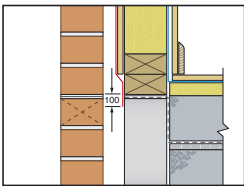
Key Benefits

- ☑ Improves thermal performance of wall construction during winter
- ☑ Reduces 85% of radiant heat in the summer keeping the building cool inside
- ☑ Helps to achieve Part L airtightness requirements

General instructions

• Applications

Tyvek® Enercor® Wall is installed directly against the external face of a sheathing ply, OSB or timber framing with the 'shiny' reflective side facing outwards into an airspace / wall cavity. Application of **Tyvek**® Enercor® Wall on site starts from the sole plate or bottom rail upwards.



• Sole plate

Tyvek® Enercor® Wall should be fixed at least 100 mm below the lowest timber member, usually the sole plate. The standard method of application for the **Tyvek**® membrane is for it to be unrolled horizontally, but it may also be laid vertically if this is more appropriate.

• Cavity

The cavity adjacent to **Tyvek**® Enercor® Wall is fundamental to benefit from the product's low emissive performance. This may be a standard 'vented' cavity behind external brick or blockwork or behind a rainscreen system. The airspace should be a minimum of 25 mm.

Fixings

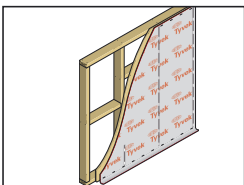
Tyvek® Enercor® Wall is normally fixed to the sheathing with stainless steel staples or corrosion resistant nails.

Horizontal fixing: generally 600 mm or at stud positions.

Vertical fixing:

- at stud positions 300 mm
- at vertical membrane joints 150 mm
- at sides of openings 150 mm
- at end of panels* 150 mm

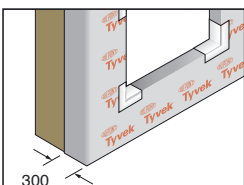
* required when membrane is fixed to panels in the factory



• Pre-fabricated panels

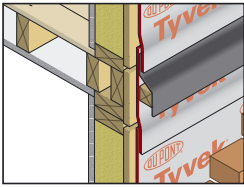
Reinforcing tape is generally used where **Tyvek**® Enercor® Wall is applied to panels in the factory. This provides additional tear resistance when transporting pre-made panels to site.

Tyvek® Enercor® Wall applied to panels in the factory should be fixed and at the sides, head and base of each panel. The membrane should extend beyond the sides and base of panels to comply with the lap requirements.



• External corners

Returns around external corners should be at least 300 mm.

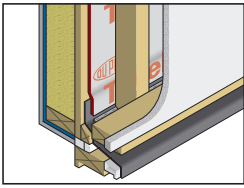


- **Cavity barriers**

Tyvek® Enercor® Wall should lap over DPCs at horizontal cavity barriers, fire stops and cavity trays. Cutting the membrane and sliding a DPC behind will be sufficient. Alternatively a separate skirting strip may be used to ensure an adequate lap detail.

- **Floor junctions**

The membrane at the base of upper storey panels should be extended sufficiently to cover the intermediate floor zone and provide a 100 mm lap over the lower panel. Lap sections on pre-fabricated panels should be temporarily fixed back for transport.



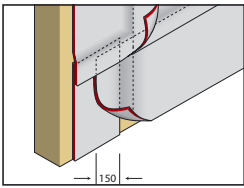
- **Window head and base details for cladding**

If an outer leaf of brick/block is being used dress **Tyvek® Enercor® Wall** over the cavity tray. If external cladding such as tile hanging, weatherboarding, render and lathe is used, dress the Tyvek® Membrane over a proprietary flashing. At the base of cladding details **Tyvek® Enercor® Wall** is generally finished to overlap the lowest timber member. It is good practice to close off the batten space behind the cladding with an insect mesh/screen.

- **Fixing to masonry and steelwork**

An anchor fixing system involving a large plastic washer should be employed, such as a Hilti X-SW soft washer fastener. **Tyvek® Enercor® Wall** may be fixed to steelwork with a self tapping screw, wall plug and washer, or an anchor system as for masonry, except with dedicated fixing such as Hilti X-EDNI nail (and X-SW soft washer).

Laps & Tape



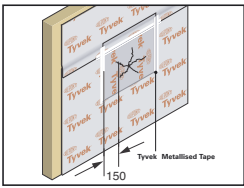
- **Laps**

The upper run of **Tyvek® Enercor® Wall** must overlap the lower to prevent water from running behind the membrane. All horizontal laps should be at least 100 mm and vertical laps 150 mm.

- **Windows and doors**

Extend **Tyvek® Enercor® Wall** over window and door openings. Cut an 'X' in the membrane and fold back. Make good to the corners with **Tyvek® Metallised Tape** (single sided).

Damage repair



Any damage that occurs in **Tyvek® Enercor® Wall** should be made good as soon as possible. Minor damage may be repaired with **Tyvek® Metallised Tape** (single sided). More extensive damage should be covered with a **Tyvek® Enercor®** patch. Large areas of damaged **Tyvek®** should be replaced completely.

Accessories

DuPont™

Tyvek®
Metallised Tape

DuPont™

Tyvek®
Butyl Tape

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Tyvek.

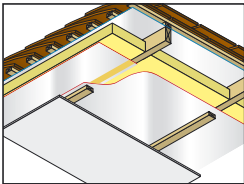
DuPont™ **Tyvek®** INSTALLATION GUIDELINES

DuPont™ Climate Systems: Tyvek® Enercor® and DuPont™ AirGuard®

Key Benefits

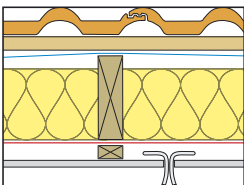
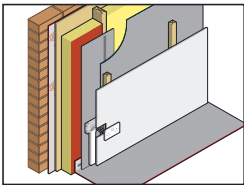
- ✓ Boost insulation performance by up to 20%, with up to 15% savings in home energy costs
- ✓ Blocks 85% of radiant heat in the summer keeping the building cool inside
- ✓ Helps to achieve Part L airtightness requirements

General instructions



• Applications

DuPont™ AirGuard® is installed onto the internal side of a roof or wall system with the reflective foil side facing into the room. The membrane may be laid either horizontally or vertically to suit.



• Cavity

The internal lining (plasterboard, etc.) must be spaced off DuPont™ AirGuard® with 25 mm timber battens to create a service void. This will help to avoid penetrations through the membrane by electrical sockets, light fittings, etc, and to maximise the reflective benefits of the membrane.

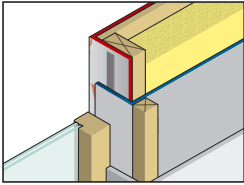
• Fixing to timber

DuPont™ AirGuard® should be temporarily fixed to timber studs, rafters or joists with non-ferrous staples or nails at approx 500 mm centres. The membrane will be properly secured once the timber battening is fixed (see batten space/service void).



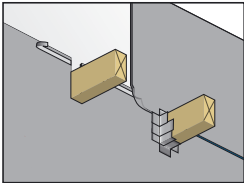
• Laps

Maintain 100 mm laps between each sheet and seal with Tyvek® Butyl Tape or Tyvek® Metallised Tape.



- **Windows/doors**

DuPont™ AirGuard® should be made vapour and convection tight at all window and door openings, loft hatches, etc. The membrane should be sealed tight against the frame with **Tyvek® Butyl Tape** or tucked in and compressed by the frame.



- **Penetration**

Penetrations through **DuPont™ AirGuard®** should be kept to a minimum and any that are made should be sealed.

Penetrations for pipework, wiring and ducting should be sealed with **Tyvek® Butyl Tape** or **Tyvek® Metallised Tape**.

Damage

If **DuPont™ AirGuard®** is abraded or punctured in any way the damaged area should be made good with **Tyvek® Metallised Tape**. Extensive damage should be covered with an **DuPont™ AirGuard®** patch and sealed with **Tyvek® Butyl Tape** or **Tyvek® Metallised Tape**.

Accessories

DuPont™
Tyvek®
Metallised Tape

DuPont™
Tyvek®
Butyl Tape

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Tyvek®

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