HUNTON

ASSEMBLY INSTRUCTION

HUNTON WINDTIGHT™ 12/19/25

TEKNISK GODKJENNING
TG 2002
SINTEF Byggforsk

Windproofing in general

Wind barriers have a number of functions, both during construction and after the building has been commissioned. Before external cladding is fitted, wind barriers must help to seal the building and protect its insulation and the rooms inside from rain and wind. Hunton also has sufficient mechanical strength to provide the building with wind bracing (for small buildings of up to two storeys).

Wind barriers also have to be able to allow moisture to pass out of the structure, and so they have to have the least moisture resistance possible. Once the structure is complete and has been commissioned, the wind barrier should protect the walls from any rainwater which penetrates the cladding and prevents heat loss due to air leaking out.

A well fitted wind barrier is crucial for achieving the intended heat insulation for a wall structure. Windtight™ have led the market for more than 35 years and their products have all the qualities a good wind barrier requires.

The Norwegian Technical Regulation for the Planning and Building Act (TEK) was amended in 2007. This defines more stringent demands stating that the air tightness of new detached houses must be kept within a lower limit of 2.5 air exchanges per hour.
In practice, this means that the implementation of the wind barrier and vapour barrier layers should be considered very carefully during fitting.

The U-value of walls can also be influenced by Windtight™. The requirements laid down in TEK 2007 state that the U-value must be, on average, 0.18W/(m²K) for the building element (energy measures model). As can be seen from the table below, the use of Windtight™ provides a contribution of 0.01 W/(m²K).

Estimated U-value (W/(m²K))
Outer wall with timber framework and Windtight™ wind barrier [1] [2]

Upright dimensions D (mm)	insulation class thermal conductivity, γ, (W/mK)			
	0,034	0,037	0,040	0,043
36 x 198 48 x 198	0,19 0,21	0,21 0,22	0,22 0,23	0,23 0,24
36 x 223 48 x 223	0,18 0,19	0,19 0,20	0,20 0,21	0,21 0,22
36 x (148 + 98) 48 x (148 + 98)	0,16 0,17	0,17 0,18	0,18 0,19	0,19 0,20
36 x (148 + 148) 48 x (148 + 148)	0,13 0,14	0,14 0,15	0,15 0,16	0,16 0,17

[1] If a wind barrier made from plaster, film or similar is used, the U-value has to be increased by 0.01W/m²K).

[2] For outer walls with cross bracing, it is possible to reduce the U-value by a further 0.01W/(m²K) for all upright dimensions.

Estimated U-value (W/(m²K))
Outer wall with I-Beam timber framework and 12 mm Windtight™ wind barrier [1]

Upright dimensions	Insulation class (W/mK)		
mm	0,034	0,037	0,040
200	0,18	0,19	0,21
220	0,17	0,18	0,19
240	0,15	0,16	0,17
250	0,15	0,16	0,17
300	0,12	0,13	0,14

Ref. NBI sheet 471.012, table 22.

[1] For wind barriers made from film, plasterboard or similar, the U-value has to be increased by 0.01 W/(m²K)

Storage

Windtight™ panels must be stored dry and be dry when fitted. Before fitting, the panels should be conditioned where necessary so that the moisture in them is more or less equivalent to the equilibrium humidity of the climate in which they are to be used. Packaging which has been opened must be protected from precipitation when being stored. Damaged panels should not be used. Hunton Tape or similar may be used for minor touching up.

1 Installation

Maximum distance between centres of uprights, beams, barriers, etc. must be 600 mm. All panel edges must be supported, and plank trusses must be placed under any transverse joints. The panel joints must be centred as much as possible on the plank trusses so that nails can be accommodated. The panels must be fitted 2–3 mm apart. Windtight™ with seams must be used in the case of upright dimensions of less than 48 mm.

The panels are secured using 2.8–45 mm roof nails at a 100 mm distance to centre along the panel edges and 250 mm to centre along the middle of the panels in order to ensure sufficient wind bracing and sealing. Alternatively, corrosion-proofed staples can be used with a minimum width of 1.8 mm and a back 20 mm long – and a minimum leg length of 28 mm with an adhesive coating. Staples are secured with the back parallel to the edge of the panel. Distance to centre the same as for roof nails. Nails and staples must be secured so that their heads/backs lie flat against the surface of the panels, but without breaking the sealing layer on the panels.

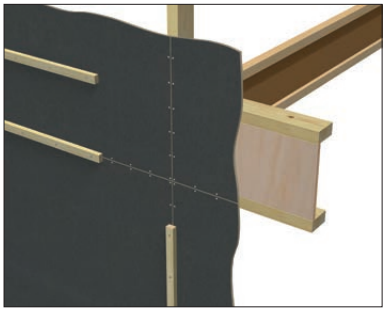
D1. Nail distance

2 Clamping of seams

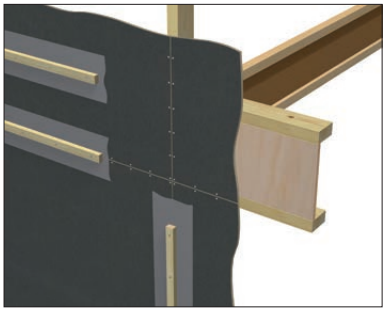
All panel seams must be secured using ties in order to ensure good air tightness. Use of slats a minimum of 23x36 mm in size, or similar, is recommended. Battening between Windtight™ and the outer cladding must be at least 20 mm.

In instances where vertical outer cladding is intended for use, thinner ties (e.g. 11x36 mm) may be used. Here, horizontal slats have to be fitted on the outside which are thick enough for the vertical classing.

For additional securing in seams between panels, it is possible to use Hunton Tape and primer or breathable cardboard strips which are stuck under the slats.



D2. Securing seams without cardboard



D3. Securing seams with tape or cardboard

3 Corner solution

It is also possible in corners to use tape or cardboard strips to provide additional security against air leaks. Panel seams must be nailed at a distance to the centre of 100 mm and be secured using slats.

D4. Corner solution

4 Lead-throughs

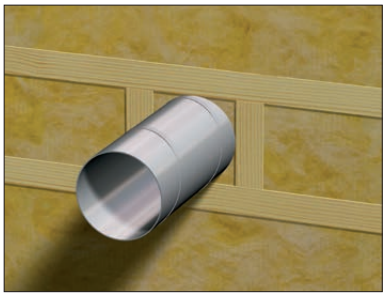
Lead-throughs must be planned and executed in a manner which will not destroy the seal of the barrier layers. Lead-throughs through the outer structure should be kept to a minimum and should be planned in advance so that it is possible to achieve a good seal.

Some critical details:
Ventilation ducts and facilities must be placed within the sealing and insulating layer for energy-related reasons as well. Duct lead-throughs must be sealed carefully. All lead-throughs for electricity and HVAC must be planned when conduits and sleeves are fitted. Balconies should not be constructed with protruding beams.

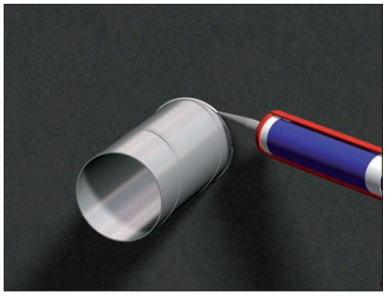
In the case of all lead-throughs in Windtight™, it is necessary to place blocks around the lead-through to ensure that the panel seams are secured sufficiently.

In Windtight™ panels, you just have to make the necessary holes for the lead-through and nail the panel to the block behind it, with a 100 mm distance to centre. It is a good idea to secure around the lead-through with Hunton Tape and primer or similar. In addition, you should secure around the lead-through, as shown in Detail 7, for optimum securing of the air teal.

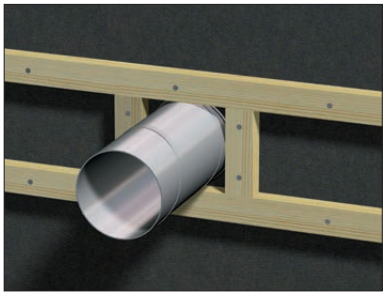
Hunton Tape and primer are extremely adhesive and allow you to secure against air leaks with ease at critical points.



D5. Blocking around lead-throughs



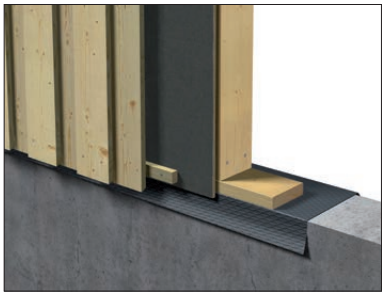
D6. Jointing around lead-throughs



D7. Securing lead-throughs

5 Transition between walls

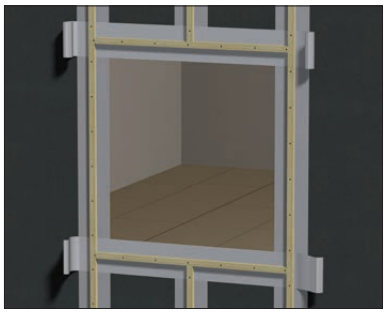
To reduce cold bridges at the transition point between a wall and a tie, Windtight™ can be moved down slightly on the top of the wall as long as you place a cardboard base at the back so that the timber does not come into contact with the concrete.



D7. Transition between walls

6 Window detail with tape

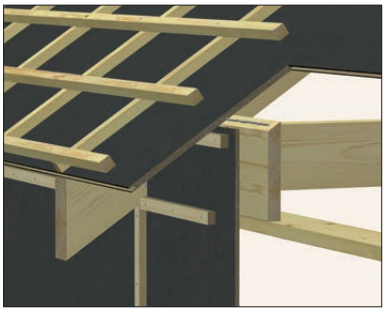
All panel seams around windows must be secured with nails or similar at a distance of 100 mm from the centre.
We also recommend that you use tape for extra security. All panel seams/ends must be secured using slats. Windows are installed according to the manufacturer's own instructions.



D8. Window detail with cardboard

7 Transition between wall and ceiling with protruding barrier

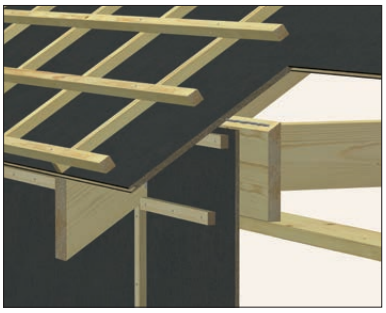
Details around the transition between wall and ceiling are important to ensure that cold bridges and air leaks are kept to a minimum. At the point where the foot of the barrier protrudes past the wall, you can cut out the dimension from Windtight™ and then move the panel up to the top of the block as shown in Detail 10. The block between barriers is recommended as this also ensures a good securing function for the ceiling. This will allow you to secure the panels to the block properly and make a joint between the panel and the protruding barrier. All Windtight™ seams and ends must be nailed at a distance of 100 mm from the centre and secured using slats. As an alternative, you can use loose protrusions as shown in Detail 10. Detail 9 shows how you can easily achieve a good air seal and keep cold bridges to a minimum. Hunton Sarket has been used for the ceiling, where aeration takes place above the panels only.



D9. Transition between wall and ceiling with protruding barrier

8 Transition between wall and ceiling with loose protrusion

Loose protrusions can be created in many different ways, but the principal shown in Detail 9 essentially demonstrates how Windtight™ is applied to Hunton Sarket in order to ensure a good seal. This is done according to more or less the same principle if other types of ceiling are used.



D10. Transition between wall and ceiling with loose protrusion

Dette papiret er 100% resirkulert
June 2013 – idetrykk.no

HUNTON

See www.hunton.no or contact us on +47 61 13 47 00, fax +47 61 13 47 10 or hunton@hunton.no

PEFC
PEFC/03-31-21

NFB
Natural FiberBoard

DNV
NORSK AKKREDITERING
MSYS 002
ISO 9001 SERTIFISERT BEDRIFT