Installation instructions

INTELLO® PLUS

Installation steps

1. Install the membranes

Roll out the membrane and fasten it using galvanised staples that are at least 10 mm wide by 8 mm long at intervals of 10-15 cm or, if blown-in insulation is to be installed, 5-10 cm. Install the membrane leaving an additional 4 cm overlap at adjacent building structures so that an airtight bond can be applied here subsequently.

2. Fasten to stud wall frame members

Fastening of membranes to metal frame members on stud wall and ceiling structures using DUPLEX. Stick the membrane, ensuring that there are no folds or tension. Rub using the PRESSFIX application tool to secure.

3. Overlap the membranes

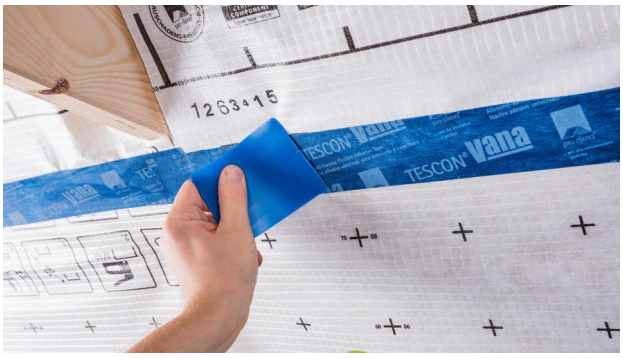
Allow for an overlap of at least 10 cm between the membranes. The marking that is printed onto the membrane will serve as a guide here.

4. Clean the subsurface

Clean the subsurface (dry and free of dust, silicone and grease) before taping; carry out an adhesion test, if necessary.

5a. Tape the overlaps

Centre the TESCON VANA system adhesive tape on the overlap and gradually stick it in place, ensuring that there are no folds or tension.

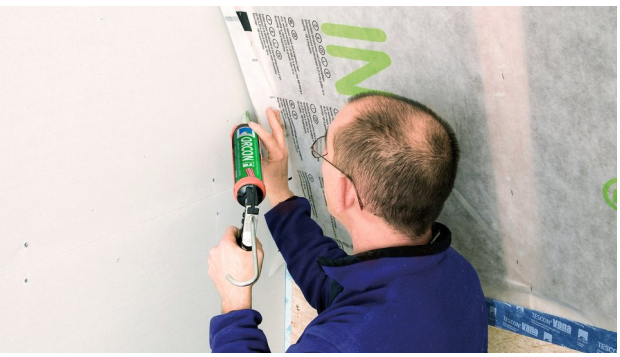


5b. Rub the adhesive joint firmly

Rub the tape firmly using the PRESSFIX to secure the adhesive bond. Ensure that there is sufficient resistance pressure.

6. Sealing to smooth, non-mineral subsurfaces ...

... (e.g. knee walls made of wood-based panels) should also be implemented using TESCON VANA system adhesive tape. Centre the tape and gradually stick it in place, ensuring that there are no folds or tension. Rub the tape firmly using the PRESSFIX to secure the adhesive bond.



7. Sealing to rough or mineral subsurfaces

Clean the subsurface. Apply a line of ORCON F adhesive sealant of at least d = 5 mm, or more in the case of very rough subsurfaces if necessary. Place INTELLO onto the adhesive bed, leaving slack to allow for expansion. Do not press the adhesive completely flat.

8a. Alternative: Sealing to mineral subsurfaces

Position ORCON MULTIBOND on the subsurface, roll it out and gradually stick it to the subsurface. Gradually remove the release film.

8b. Applying membrane / Rubbing the joint firmly

Apply the membrane onto the adhesive strip, leaving slack for expansion so as to allow for relative motion between components. Rub firmly to secure the adhesive bond using the PRESSFIX. Ensure that there is sufficient resistance pressure.

9. Sealing to unplastered subsurfaces

Guide the vapour control membrane into position. Leave slack for expansion so as to allow for relative motion between components.
Remove all release films from CONTEGA SOLIDO SL or CONTEGA SOLIDO IQ.
Centre the tape and gradually stick it in place. Rub the tape firmly using the PRESSFIX to secure the adhesive bond.
To achieve airtightness, plaster over the masonry and sealing tape.

10. Alternative: Sealing to unplastered subsurfaces

Stick the CONTEGA PV plaster-sealing tape onto INTELLO using self-adhesive strips. Ensure the tape remains in place by using ORCON F at discrete points. First plaster behind the tape, then apply the tape to the wet plasterwork and plaster over it fully.

11a. Sealing to roughly sawn timber

Clean the subsurface. Apply a line of ORCON F adhesive sealant of at least d = 5 mm, or more in the case of very rough subsurfaces if necessary. As an alternative, a roll of ORCON MULTIBOND adhesive sealant can be used.

11b. Sealing to roughly sawn timber

Place INTELLO onto the adhesive bed, leaving slack to allow for expansion. Do not press the adhesive completely flat.

12a. Sealing to plastered chimney (insulated or double-shelled)

Seal INTELLO using ORCON F as shown in Figure 7.

12b. Sealing to plastered chimney (insulated or double-shelled)

Then cut into short pieces of TESCON VANA as far as the centre, create corner shapes and then stick in place.

13. Sealing around pipes and cables

Place a KAFLEX or ROFLEX sealing grommet over the cable or pipe and stick to INTELLO. The cable grommets are self-adhesive. Tape the pipe grommets to the membrane using TESCON VANA.

14. Corner sealing

Guide TESCON PROFECT pre-folded corner sealing tape into the corner while the release film is still in place and stick the first independent adhesive strip. Then remove the release film and stick the second independent adhesive strip.

15. Battens, interior cladding

Install battens (e ≤ 50 cm) to bear the weight of the insulation, and install interior cladding to provide protection against UV light and other damage.

16. Quality assurance

It is recommended that airtightness should be checked using a blower door test.

General conditions

Where possible, INTELLO PLUS should be installed in such a way that adhesion can be carried out using single-sided adhesive tape on the smooth (printed) side of the sheeting. It should be installed taut and without slack either in parallel with or perpendicular to the supporting structure, e.g. the rafters. In the case of horizontal installation (perpendicular to the supporting structure), the separation distance of the supporting structure is limited to a maximum of 100 cm. After installation, perpendicular battens on the inside at a separation distance of a maximum of 50 cm must be fitted to carry the weight of the insulation material.

If regular tensile loads on adhesive tape bonds are to be expected – for example, due to the weight of the insulation material – when using mat or panel-shaped insulation materials, an additional supporting batten should be fitted over the overlap sealing. When attaching the membranes in the case of mat or panel-shaped insulation materials, a maximum separation distance of 10 to 15 cm applies for the fastening staples, which must be at least 10 mm wide by 8 mm long. The overlaps between the membrane strips must be approx. 8 to 10 cm.

Airtight seals can only be achieved on vapour control membranes that have been installed without folds or creases. Ventilate regularly to prevent excessive humidity (e.g. during the construction phase). Occasional, intermittent ventilation is not sufficient to remove large quantities of moisture due to construction work from a building; use a dryer if necessary.

As a consequence of their humidity-variable properties, humidity-variable vapour control membranes are generally subject to swelling and contraction when they absorb or release moisture. This particularly applies in the case of major changes in the ambient humidity (e.g. after wet work has been carried out or after strong drying). For this reason, it is important to provide sufficient ventilation to remove high levels of air humidity, to use secure mechanical fastening by means of staples and support battens, and to provide sufficient slack to accommodate relative motion.

To prevent condensation formation, INTELLO PLUS should be sealed and taped in an airtight manner immediately after the installation of mat or panel-shaped thermal insulation materials. This particularly applies when working in winter.

Additional instructions for blown-in insulation materials
INTELLO PLUS can also be used as a boundary layer for blown-in insulation materials of all types. A reinforcement structure ensures that there is little expansion during the blowing-in process. Installation in parallel with the supporting structure has the advantage that the joint will be on a solid base and is protected by this base.
The separation distance between the staples used to fasten the membrane strips must be a maximum of 5 to 10 cm. Staples should be oriented parallel with construction timber so that membranes do not tear at the staples when insulation material is being blown in. If installation is carried out perpendicular to the supporting structure, a supporting batten should be fitted directly over the membrane strip overlap with its airtight sealing in order to avoid tensile loading on the adhesive bond.
When working in cold outdoor climates, the blown-in insulation material should be inserted immediately after installation of INTELLO PLUS. This will protect the membrane against condensation formation.

The applications and conditions described here are based on current research findings and practical experience. We reserve the right to change the recommended application designs and installation methods and to develop and thus change the properties and quality of individual products. We would be glad to inform you about the current state of engineering knowledge at the time that your installation is carried out.

The planning documentation that is available from pro clima provides further information about installation methods and design details. If you have questions, please contact pro clima Technical Support in Ireland and the UK:
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