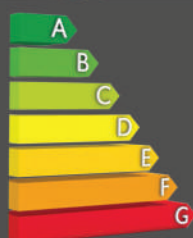
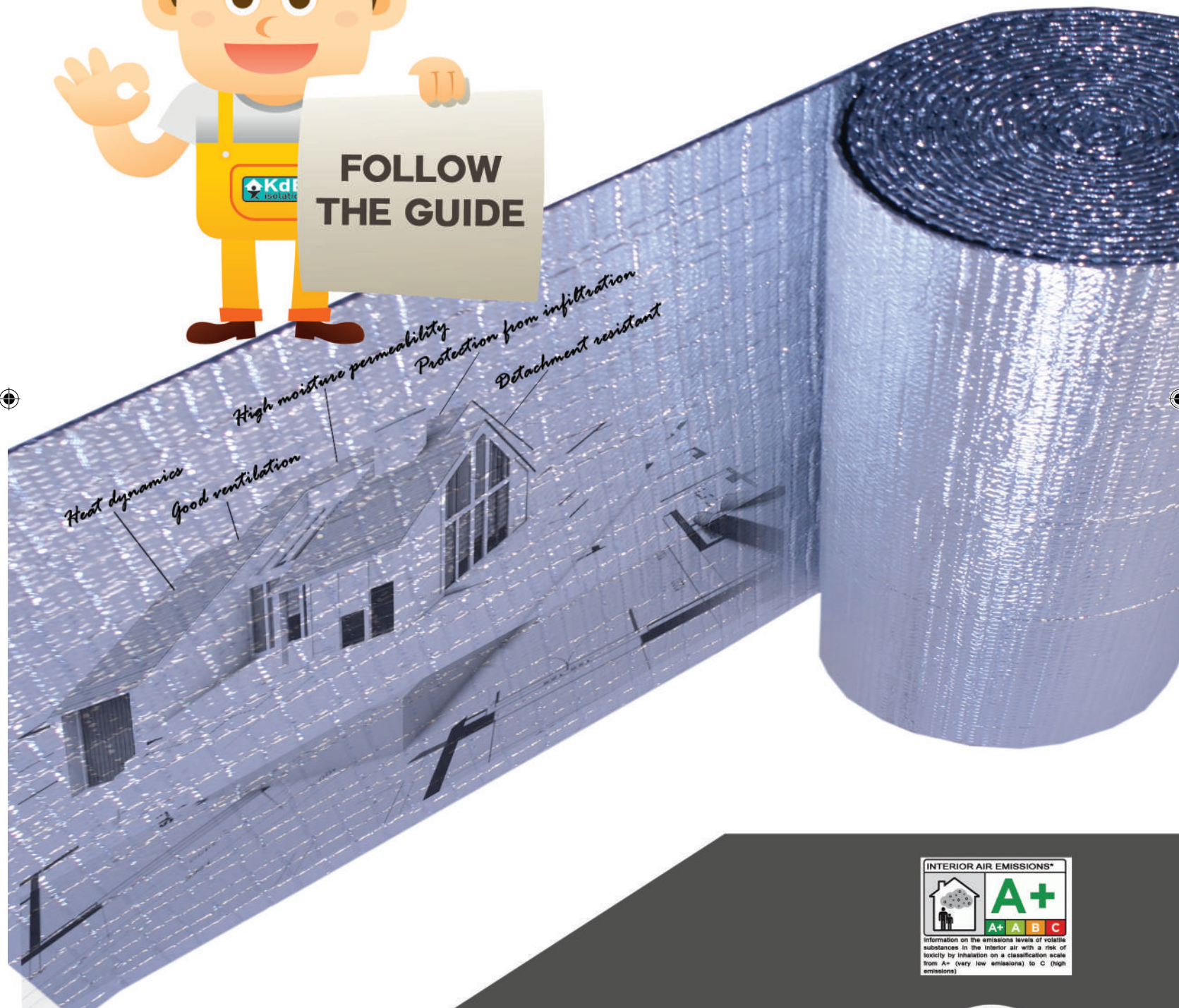




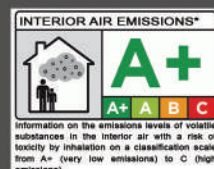
OUR THIN REFLECTIVE INSULATIONS



For New Work as well as Renovations



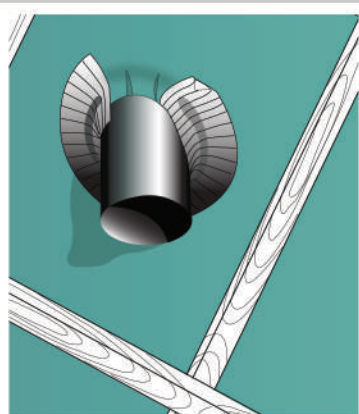
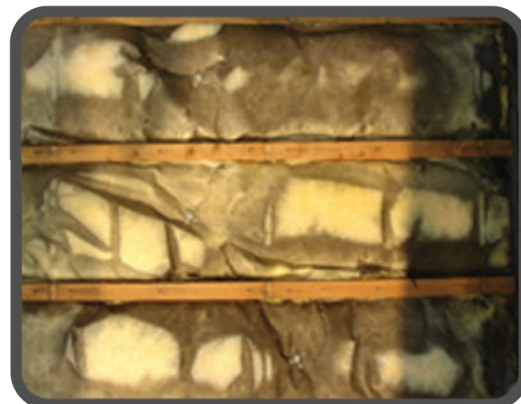
Complete mastery and proper understanding...



Advice prior to installing Thin Reflective Insulation (TRI)

It is essential that the condition of the base structures be checked before installation. After insulation has been installed, it must be checked to ensure it is in proper condition:

- ✔ No signs of moisture, mould or rotting.
- ✔ No inappropriate entry of air (e.g. unused pipe).
- ✔ No crushed spots, and insulation completely fills the place where it is installed.



✔ The covering must be rain proof,

✔ Roof frame components must be in good condition and not moist,

✔ They should be cleared of anything that could perforate the insulation:

- nails, electric cables, etc.

✔ If a subjugent roof screen is installed or maintained, best practices of the trade must be followed, particularly concerning ventilation of the air space under the roofing, as needed and according to applicable provisions:

- Homologation,
- DTU series 40,
- E-Book of the CSTB 3651-2

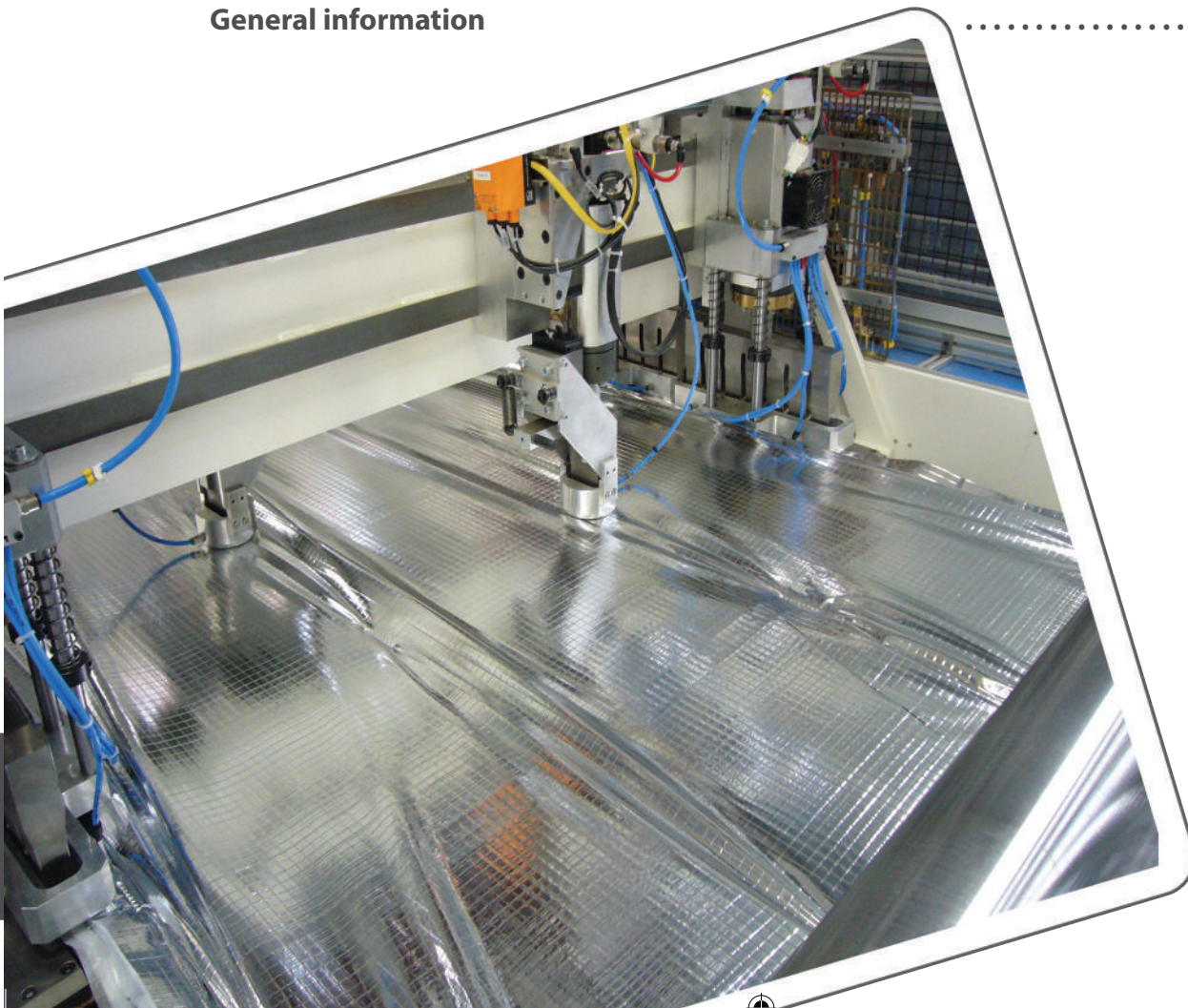


Although subjugent roof screens are air and water proof, they are no substitute for a tarp, be sure to protect your work site from bad weather.

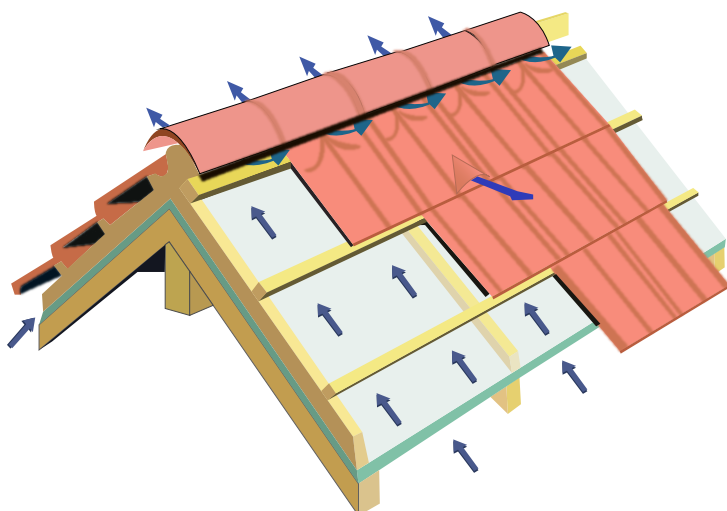
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Technical details and special aspects	page 8
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Ventilation is a key factor for your health and a healthy home

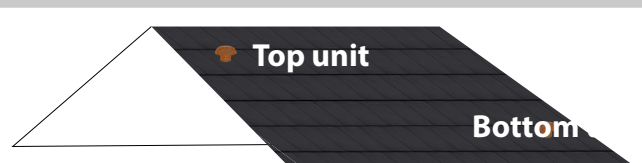


Air extraction:
Either through the roof ridge or
via vent caps,
Or by ventilation tiles

Air entry:
Either by ventilation tiles,
Or via eave spaces

The air space ventilated between the surface of the insulation, of whatever type, and the under side of the roofing must be at least 40 mm in depth (DTU series 40). In order to obtain this volume, the counter-battens must be 27 mm thick and the battens 14-27 mm thick, depending on the type of roofing.

Placement of tiles with clay vent or mushroom-shaped PVC vent on one roof slope

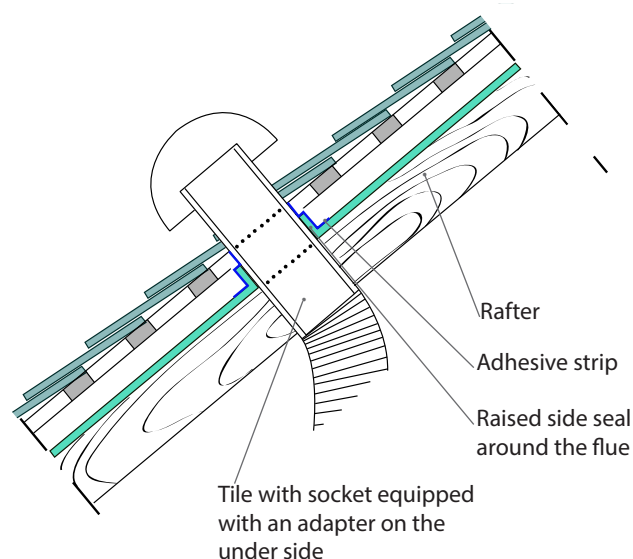


Ventilation of insulated and uninsulated crawl spaces and attics

Whether a crawl space is insulated or uninsulated, it absolutely must be ventilated.

The builder is responsible for informing the customer about the risks involved in not having mechanical ventilation, and for recommending a suitable solution.

TRI as a subjacent roof screen:
AIRFLEX or PERMOVAP
or XL'AIR or XL'TOP5+

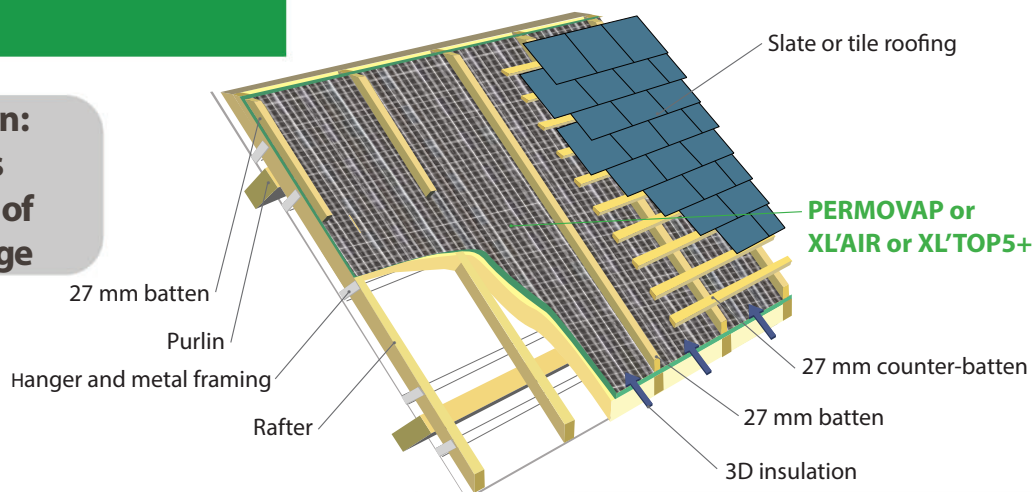


Installation of TRI as a subjacent roof screen with existing 3D insulation

HPV subjacent roof screen



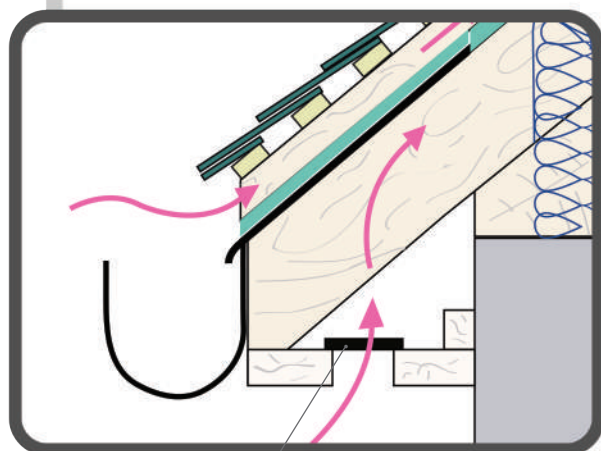
HPV Screen:
Continuous
installation of
the roof ridge



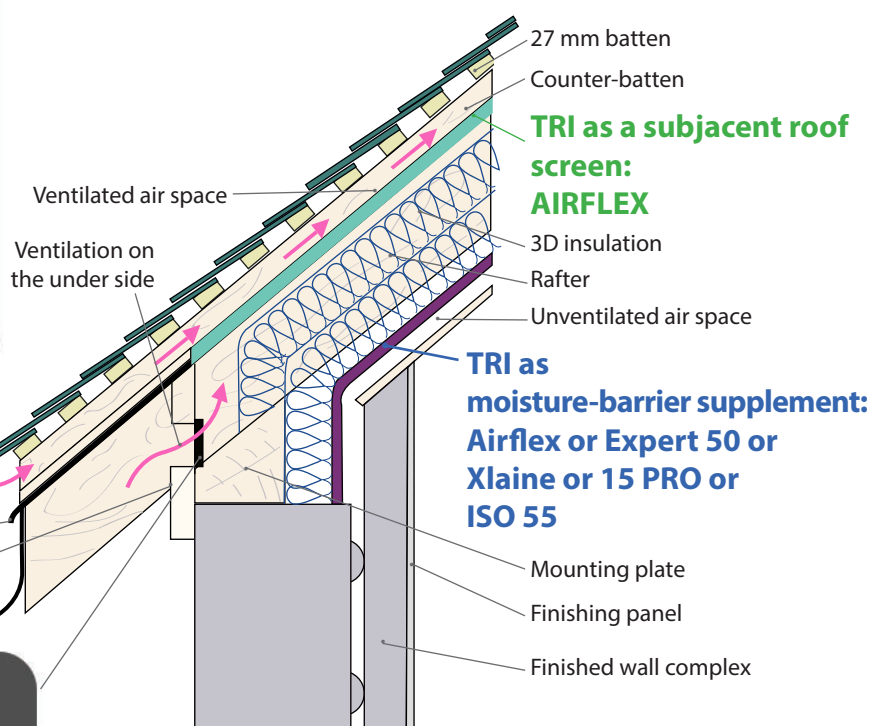
Waterproof subjacent roof screen



- Ventilation mandatory on the under side
- 50 mm minimum on both sides of the roof ridge

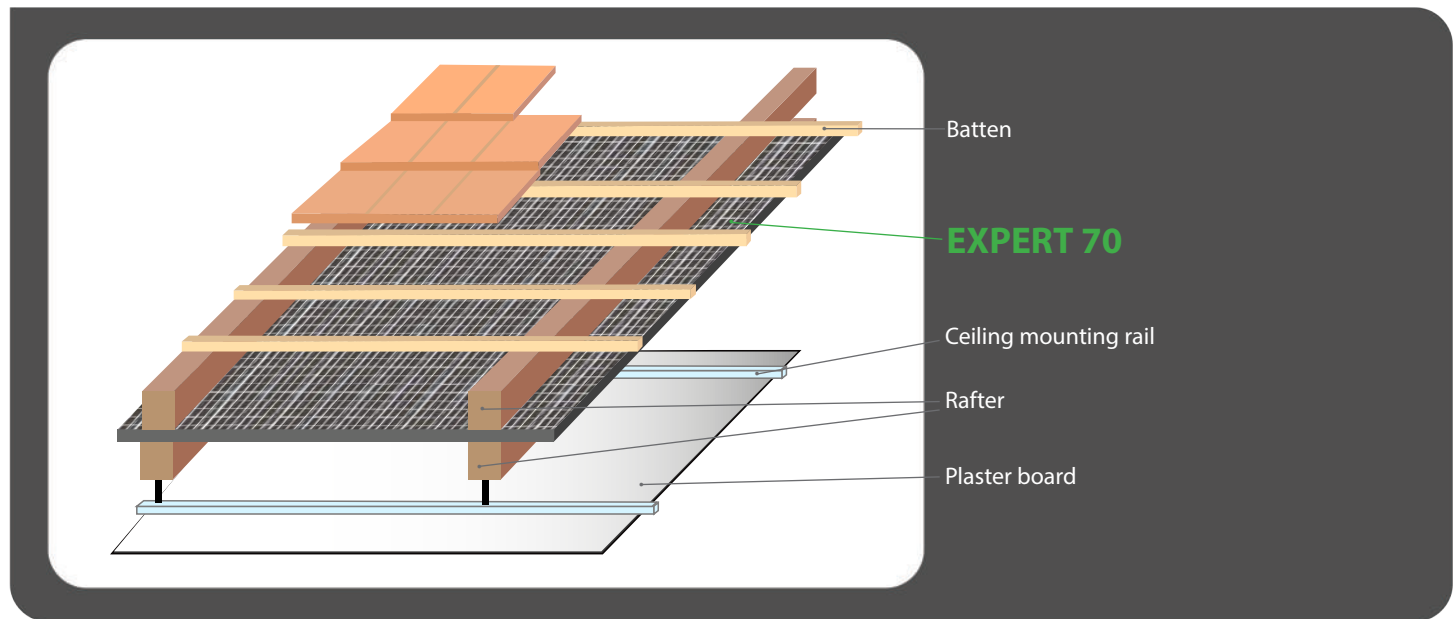


Air entry with insect screen compliant with DTU



Installation of TRI as a subjacent roof screen alone

Installation of EXPERT 70



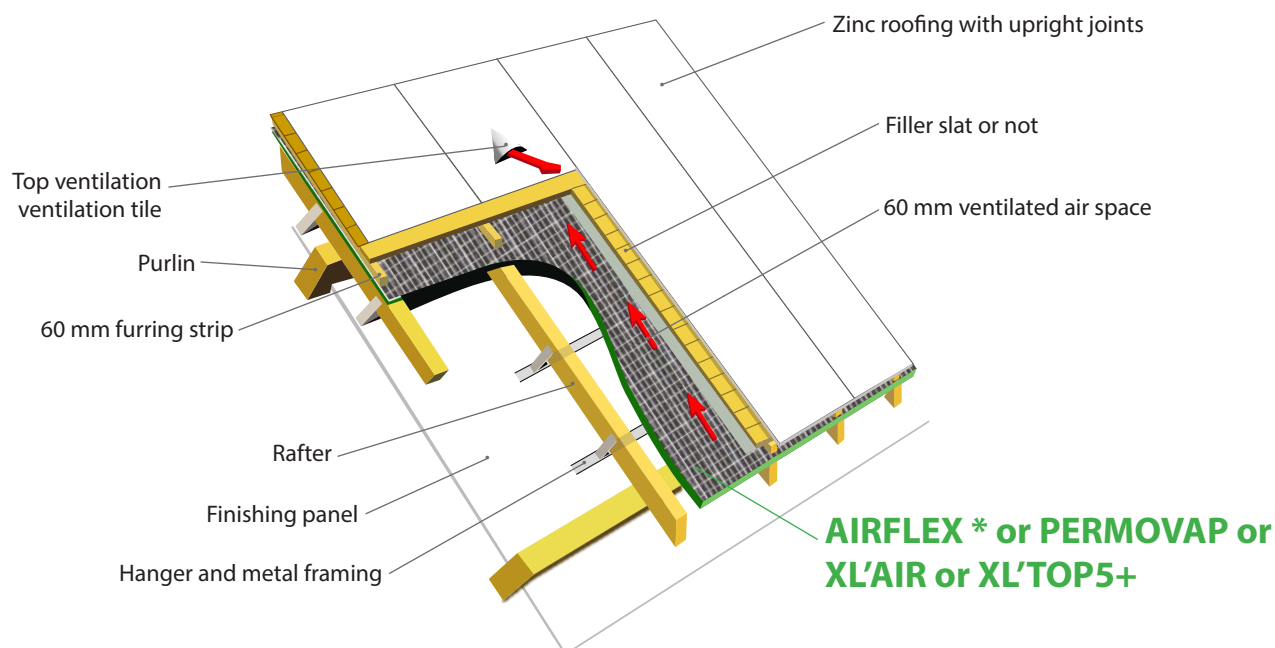
Continuous installation of TRI with option to add an HPV subjacent roof screen such as Permopak, XL AIR or XL TOP 5+ (see installation on page 12)



Installation of TRI alone as a subjacent roof under zinc and steel panels

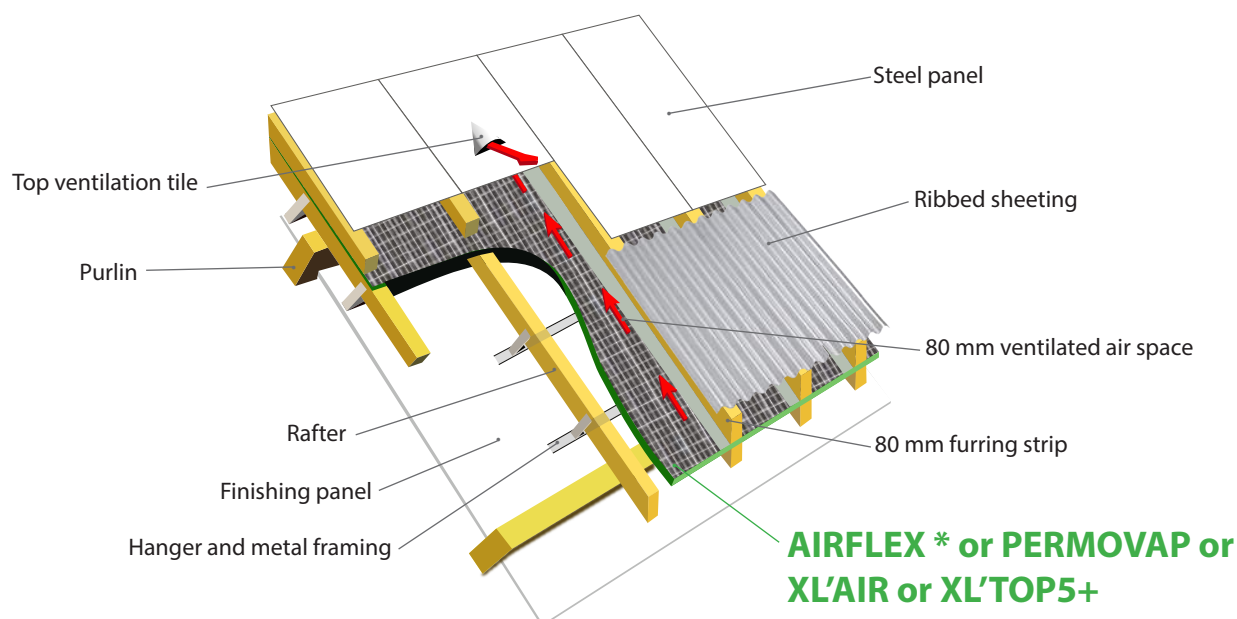


Installation on rafters under zinc panels with upright joints



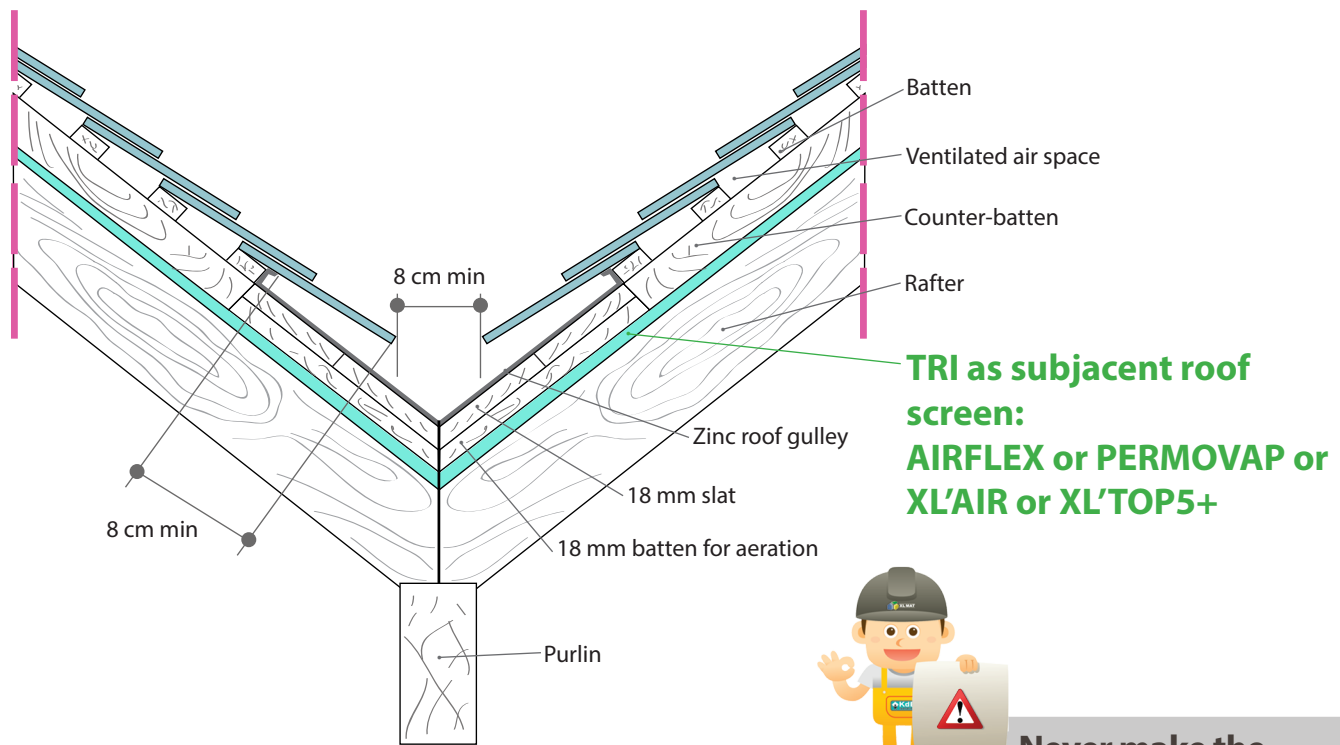
Installation on rafters under steel panels or ribbed sheeting

- * Ventilation mandatory on the under side
- * Opening of 50 mm minimum on both sides of the roof ridge
- * According to the standard DTU 40.41, Article 3.52, the ventilated air space must be 40 mm for a roof with a roof slope of less than 12 m and 60 mm with a slope of more than 12 m.



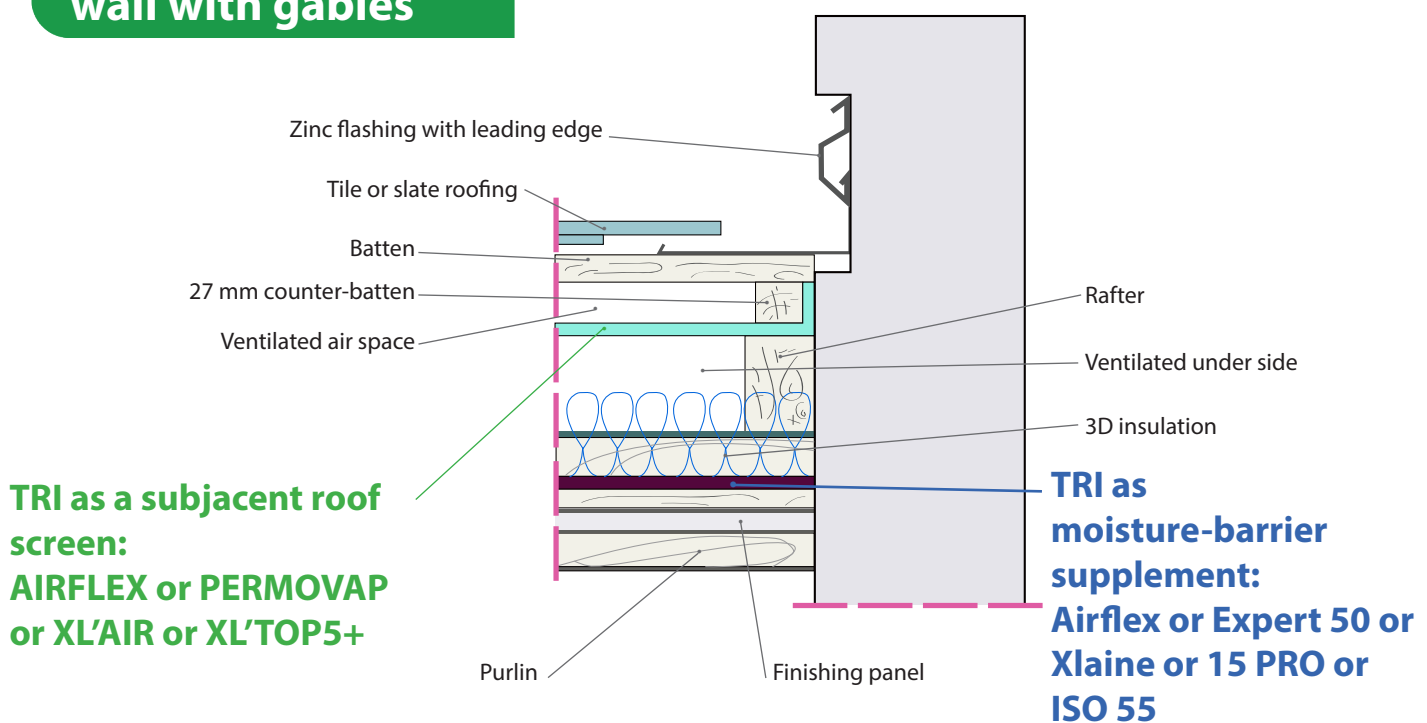
Special technical details

Making a roof gully



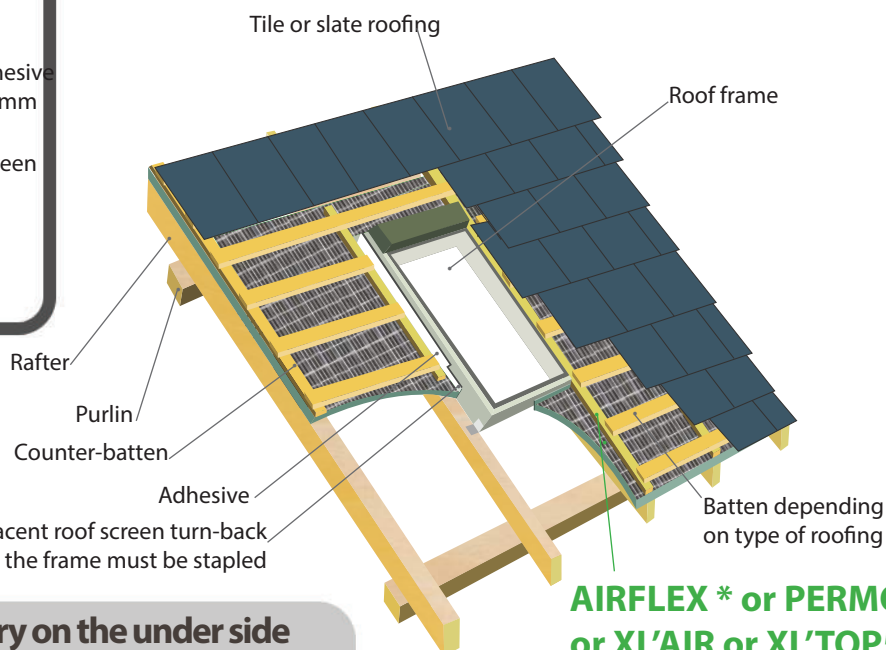
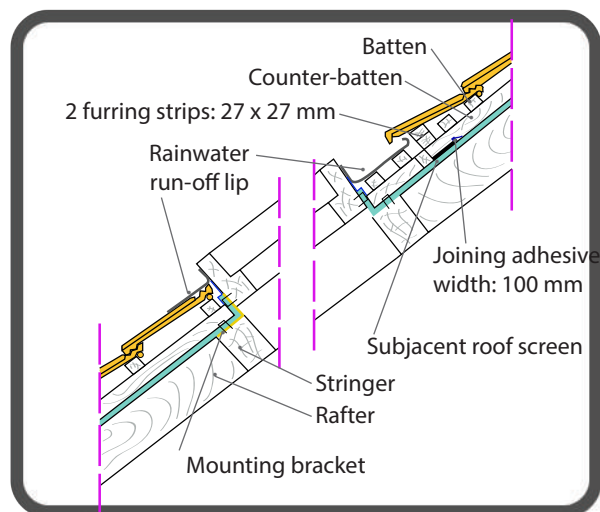
Never make the sealing joint at the bottom of the gully

Finishing on side wall with gables



Installation of roof window and chimney flue

Connection to roof frame



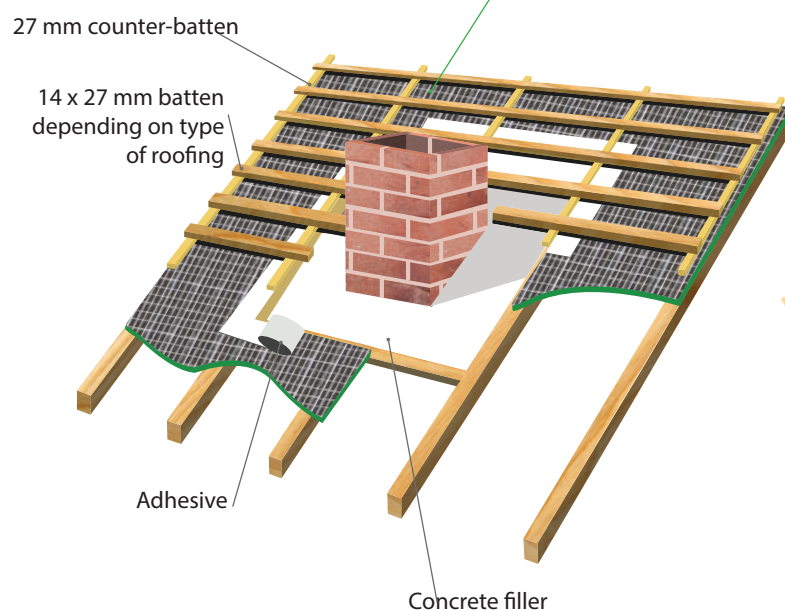
AIRFLEX* or PERMOVAP or XL'AIR or XL'TOP5+



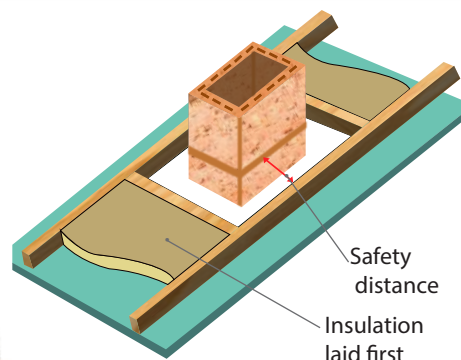
- * Ventilation mandatory on the under side
- * Opening of 50 mm minimum on both sides of the roof ridge

Fire protection

AIRFLEX* or PERMOVAP or XL'AIR or XL'TOP5+



Allowance for chimneys/smoke flues



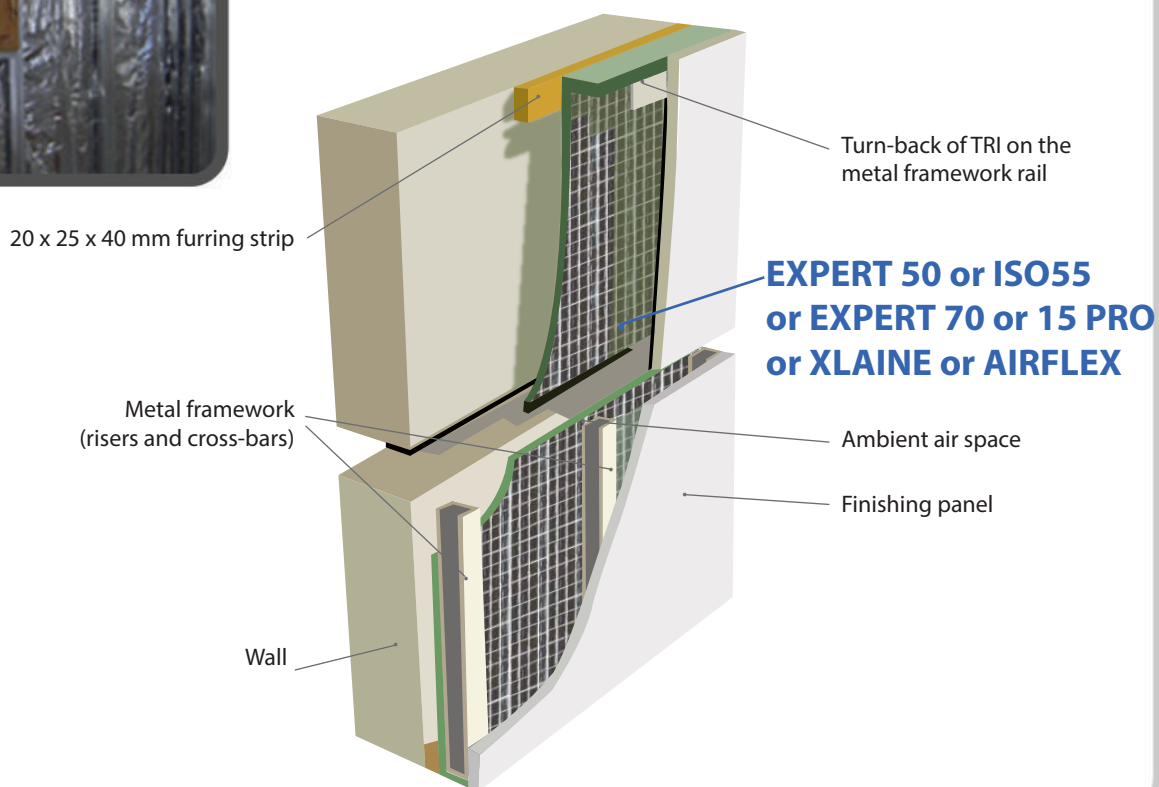
The standard NF DTU 24.2 stipulates a fire safety distance that depends on the type of chimney/smoke flue and its temperature classification. One should follow all of these specifications in every aspect for fire safety distances.

Installation of TRI in a vertical wall interior and exterior



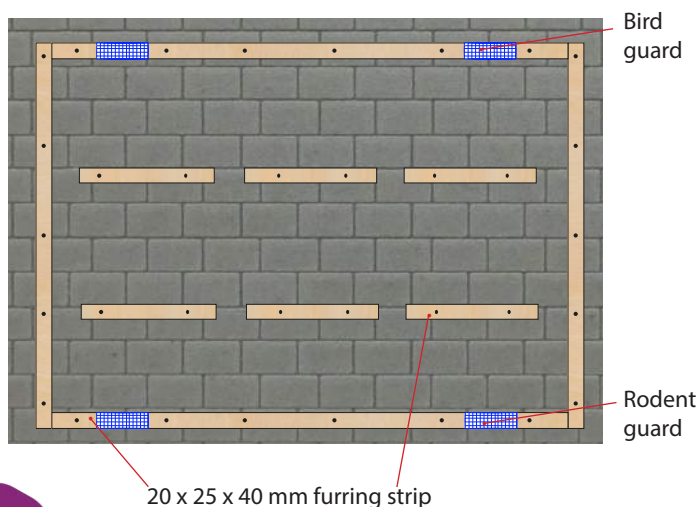
The system using a metal framework allows one to re-plumb an old wall

INTERIOR SYSTEM



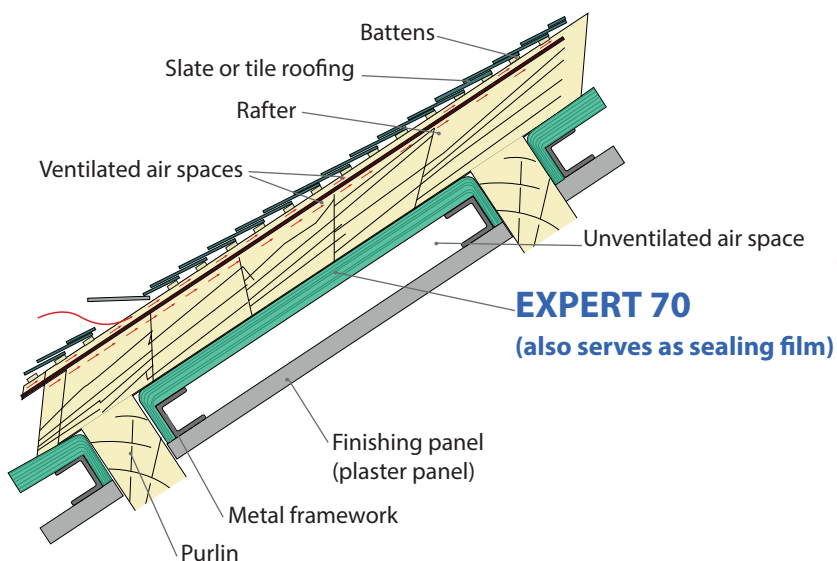
Principle of using discontinuous furring strips to provide ventilation of the air space between the exterior wall and the reflective insulation

EXTERIOR SYSTEM (HPV TRI)



Installation of TRI in a roof slope

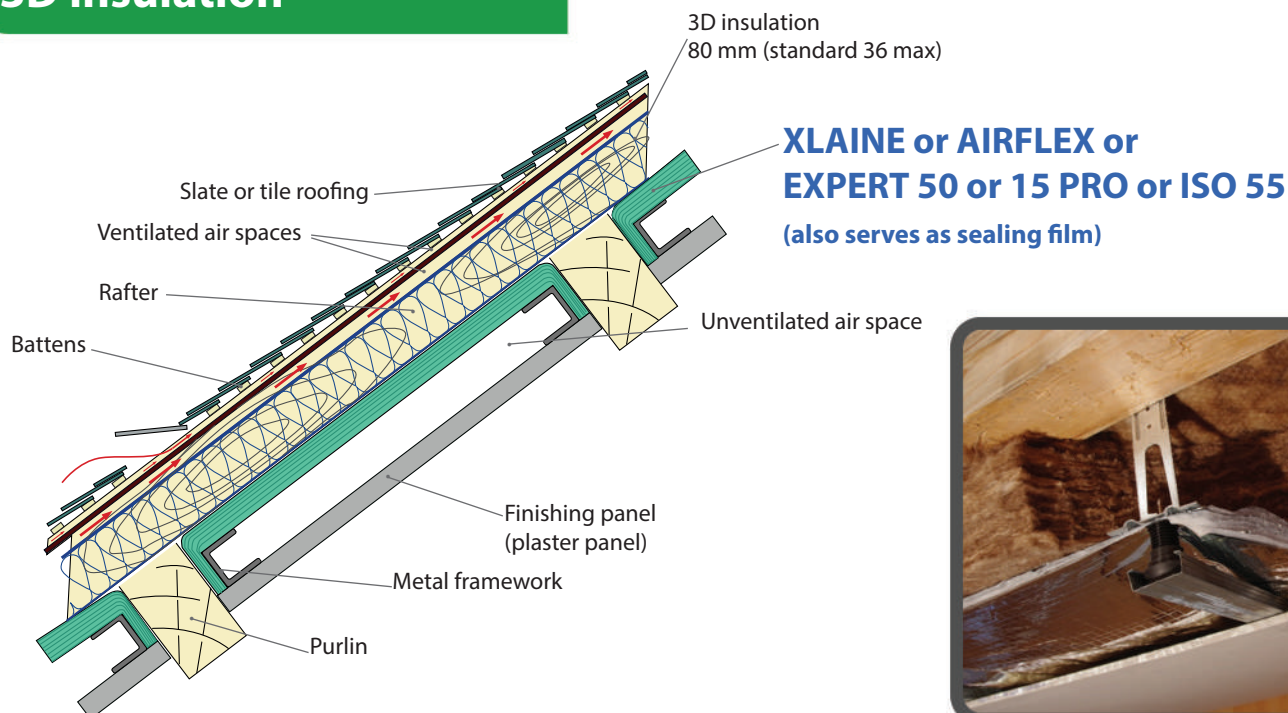
Installation alone



Recommendation for installation:

- Staple every 200 mm and seal with an adhesive.
- 100 mm minimum layer overlap

As a supplement to 3D insulation



SIXBOX hangers to ensure seal

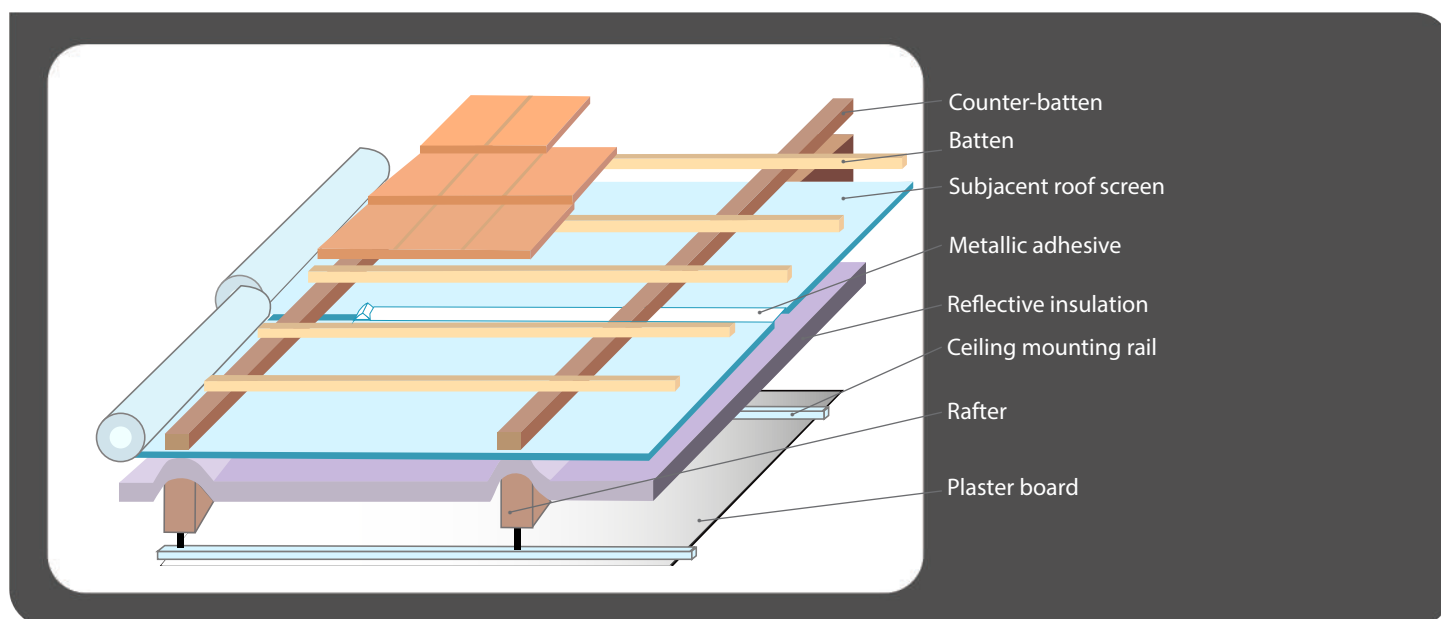


The 3D insulation must not have a moisture barrier, if it does, the barrier should be cut into. **Recommendation for installation:**

- Staple every 200 mm and seal with an adhesive.
- 100 mm minimum layer overlap

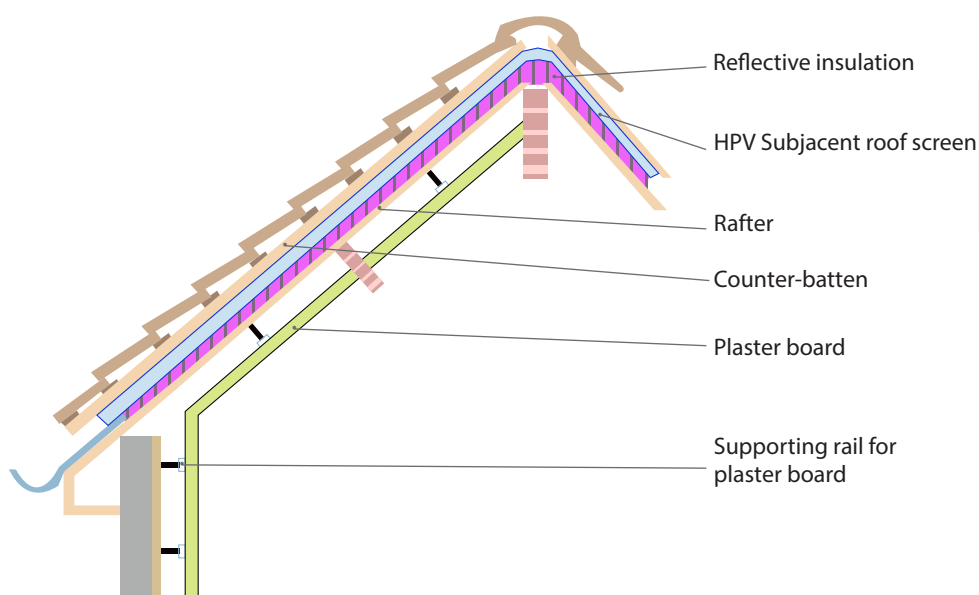
Installation of TRI and a reflective subjacent roof screen

Continuous installation of TRI and subjacent roof screen



Moisture-permeable subjacent roof screens: PERMOVAP, XL'AIR, XL TOP5+

THIN REFLECTIVE INSULATION (TRI): EXPERT 70, EXPERT 50, ISO 55, 15 PRO, XLAINÉ



**Continuous installation
of subjacent roof screen
with closing at the roof
ridge line**


































In case of holes drilled and at the ends of layers or Thin Reflective Insulation, be sure to create a complete seal using Kdb/XL MAT metallic 100 25 tape



Product line

XL MAT - KdB



				Applications	Roof exterior installation	Roof interior installation (crawl spaces) (2)	Wall interior installation	Wall exterior installation	Floors	Ceilings	Ground	Flashcode
Our insulation line	EXPERT 70			(1)	X	X	(1)			X		
	EXPERT 50			(1)	X	X	(1)			X		
	XLAINÉ 18			(1)	X	X	(1)			X		
	15 PRO			(1)	X	X	(1)			X		
	ISO 55			(1)	X	X	(1)			X		
Our insulation accessories	AIR FLEX			(1)	X	X	(1)		X	X	X	
	DUOREFLEX			(1)	X	X	(1)		X	X	X	
Our roof underlayer screens HPV insulation accessories	PERMOVAP			X			X					
	XL'AIR			X			X					
	XL TOP 5+			X			X					
Moisture barrier	XL VAP				X	X				X		
Fire proof	MAX FEU			(1)	X	X				X		

(1) As part of exterior installations, ventilation on the underside must be included.

(2) To comply with regulations, finish the insulation using a caulking insulator.

Tips and Tricks for the installation of THIN REFLECTIVE INSULATION



Start installation at the top of the roof slope or vertical wall:

- Use a few staples or double-sided tape to temporarily hold the product in place before attaching the first rail.



Type of wall mounting staples:

- ⚠ Dimension: 18 mm minimum.

This type of staples requires the use of a staple gun (electric or pneumatic).



For cutting, use:

- Scissors with blades longer than 20 cm.



Pre-assemble all the adjacent sections on the ground using the built-in adhesive.



Thin Reflective Insulation can be installed on the inner side (heated side) of a new structure, or existing structure between previously installed insulation, if any, and the interior wall or ceiling.



Thin Reflective Insulation can be installed with one or two air spaces on either side, regardless of the type of roof framing:

- Classic framing, or
- Industrial framing,
- Raised trusses, in new or existing structures.



The creation of air spaces adjacent to thin reflective insulation requires the installation of:

- Either a wood frame comprised of raised furring strips greater than or equal to 40 mm and treated with a preservative that is compatible with the other materials present,
- Or a metal frame comprised of rails U/40/50/40 and risers C/40/48/40, used to build walls made with plaster panels (see DTU 25.41 and standard NF P 72-203-1).

General information



Nails and screws can be used to install our thin reflective insulation and subjacent roof screens.



In the case of interior finishing with plaster caulking or other moisture-producing materials, plan for ventilation and maximum airing out over several days.



For structures at altitudes of more than 900 m, please refer to the special regulations for mountains.



100 mm minimum overlap of widths.



As with all aluminium products, AIRFLEX must have an earthing connection for each panel.



When installing Airflex as a subjacent roof screen, one must leave an opening at the roof ridge line and gutter line.



Do not install lighting that emits high heat levels in ceilings or false ceilings.



Store Thin Reflective Insulation and subjacent roof screens indoors in both summer and winter.



In compliance with regulations, Thin Reflective Insulation must not be visible in inhabitable rooms.



Thin Reflective Insulation must not be perforated by mounting legs or hangers.

Our Thin Reflective Insulations designed for your projects

**Roofs, Interior and
Exterior walls,
crawl spaces, and still more...**



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697, Route des Chênes - Z.A. de Terre Neuve
73200 Gilly sur Isère
Tél.: +33 (0)4 79 37 54 40 - Fax :
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