

HELLA



TRAV INTEGRAL

The seamless system

IN THREE STEPS TO THE COMPLETE SOLUTION

From perfectly coordinated products to a straightforward package for timber frame professionals.



Straightforward window installation

What is the technically simple and structurally ideal way to integrate a window, window sill, solar shading and insect screen into a timber frame wall? The answer to this complex task is: TRAV Integral. A complete unit is installed in the wall opening that seamlessly integrates the window and the solar shading device. Thermal bridges, water ingress, cracks in the plaster and other constructional faults are virtually eliminated, while the energy values and noise insulation are simply brilliant.

An easy solution

Be it solar shading, insect screen, window sill or connected products: to purchase the TRAV Integral, all you have to do is measure the opening, order the windows and that's it. Thanks to the high degree of prefabrication offered by longstanding company HELLA, defects during installation are minimised and the time needed for installation is reduced. The solution saves time and money and is a real boost to the seamless system. Additionally, the time-consuming planning and coordination of the works is minimised.



1. Prefabricated wall with window opening.



2. Installation of TRAV Integral in the window opening.

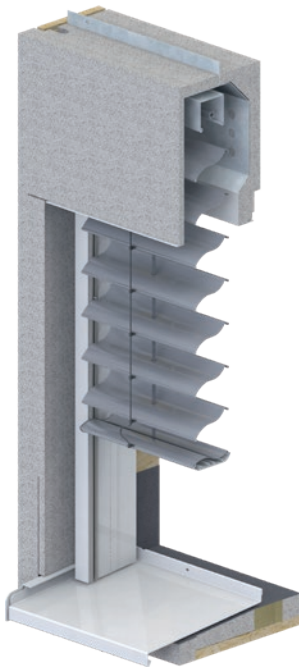


3. Completion of the system with insulation and window sill inside and outside.

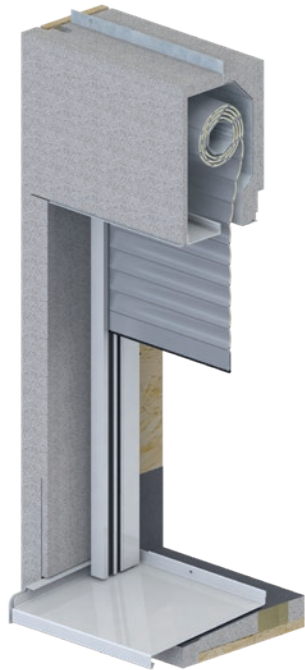
VERSIONS

The reveal system enables the integration of pre-assembled solar shading products into a complete solution and is installed directly into the prefabricated wall. TRAV Integral is available with outdoor blinds, external blinds, roller blinds or vertical awnings and can be fitted with an insect roller screen as an option.

TRAV Integral
Outdoor blinds & external blinds



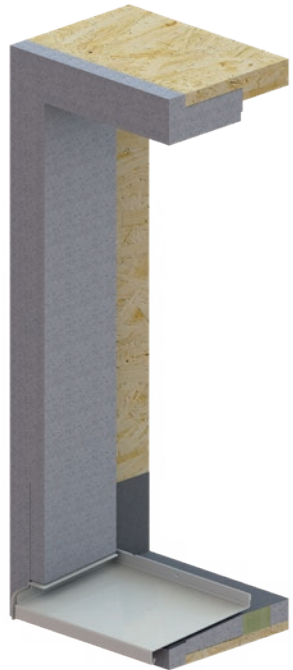
TRAV Integral
Roller blinds



TRAV Integral
Vertical awnings



TRAV Integral
Window frame



TECHNICAL HIGHLIGHTS

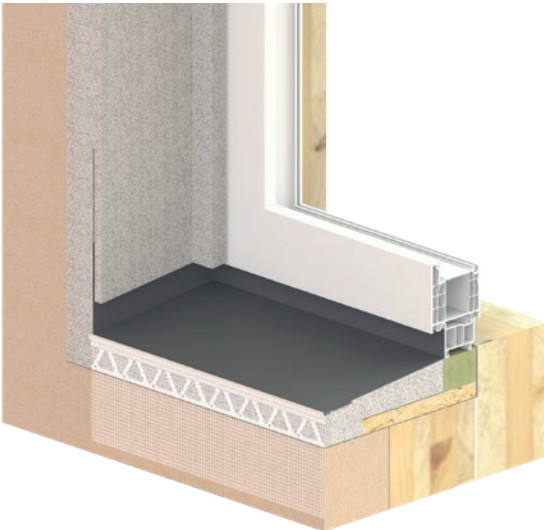
Two-piece window sill

The two-piece aluminium window sill developed by HELLA is part of the reveal system. It is perfectly adapted to and supplied with the system as standard by HELLA. This guarantees the compliant installation of the window sill with integrated guide rails for solar shading devices..



Second water-bearing layer

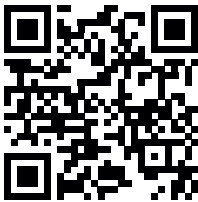
The connection between the window sill and the structure is a particular challenge in timber frame buildings. To ensure lasting protection against water ingress, it is easy to install a second water-bearing layer in the TRAV Integral on site. The window sill with the sliding closure, tested by the ift*, facilitates professional installation and also prevents cracks from forming in the plaster around the window sill.



* Institute for testing and certification of building products, ift
Rosenheim, Institute for Window Technology

NUMEROUS SMART ADVANTAGES

1. Defined window rebate
 - Connection to the window can withstand driving rain
 - Insulation of the window frame (in accordance with the standard)
 - Improvement of the thermal values and noise insulation
2. Preparation for the second sealing layer on the window sill, insulation wedge and reveal
3. The window sill's sliding closure prevents the formation of cracks in the plaster and damage caused by water ingress
4. Box system optimized for timber frame construction
5. Integrated solar shading
6. Robust box made of galvanised sheet steel
7. Plaster base board
8. Variable box closure
9. Prefabricated reveal
10. The base profile ensures safe load transfer and excellent insulation
11. Aluminium window sill 2 mm
12. Additional mounting bracket



Watch the TRAV Integral explanatory video!

SUSTAINABILITY TIMES THREE

For HELLA, sustainability is more than just a buzzword - it's a commitment to a holistic attitude and has been practised by the owners for decades. Consistently acting in a sustainable way means acting in a manner that is environmentally friendly, economical and socially sustainable. The company maintains long-term relationships with customers, suppliers and employees and continuously minimises the environmental footprint of its products. Thus, for example, the slatted hinges of the outdoor blinds have recycled aluminium content of 80 per cent.

With its products, not only does the company come up with solutions that improve the energy balance of buildings, but also works to reduce the ecological footprint in relation to its own location. HELLA produces more energy at its headquarters than is consumed thanks to its own hydroelectric power plant and participation in a biomass heating plant. In order to be energy self-sufficient there in the future, photovoltaic systems will be installed on the roof of the production plant. The energy management principle "Saving, generating and stocking energy" defined at the company headquarters is constantly being extended to further business locations.

The most sustainable solution for a comfortable indoor climate and protecting against the summer heat is automated outdoor shading. The main function of external sun protection is to reflect the sun and ensure that the heat does not penetrate into the interior. With the ONYX control system developed by HELLA, which can be connected to

all common smart home systems, the sun protection systems become even more sustainable and allow the sun to get in only where it is wanted. The system can also react to the weather in order to optimally adapt the sun and heat protection to the conditions. The ONYX weather sensors detect influences such as wind speed, sun intensity and temperature on the façade. The obtained data can then be used to customise the products to residents' needs.

Depending on the building, age and size of the window area, up to 30 per cent of heating energy can be saved using automated, external sun protection, like roller shutters. Savings of up to 50 per cent can also be achieved when cooling. Sun protection products have a clear advantage over air conditioning systems when it comes to sustainability. The latter not only consume energy, but also directly contribute to warming the urban space through the warm exhaust air. Intelligent sun protection systems thus make an important contribution towards CO2 savings and climate protection.

