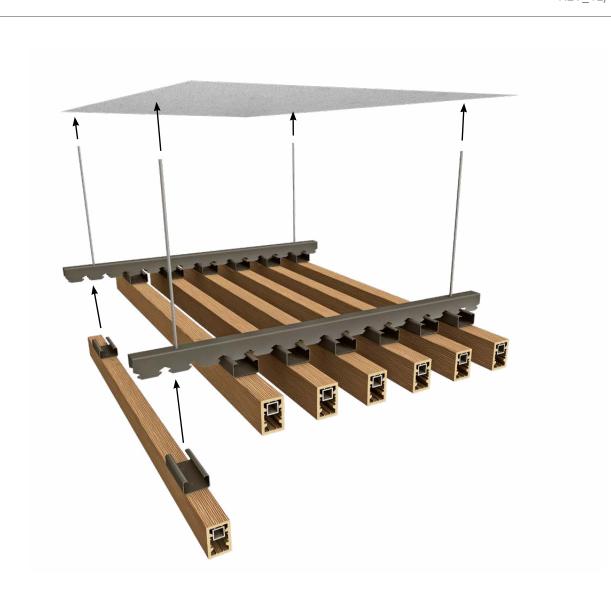


LAYING INSTRUCTIONS



NOVO-UP SYSTEMFOR FALSE CEILINGS

Patent pending

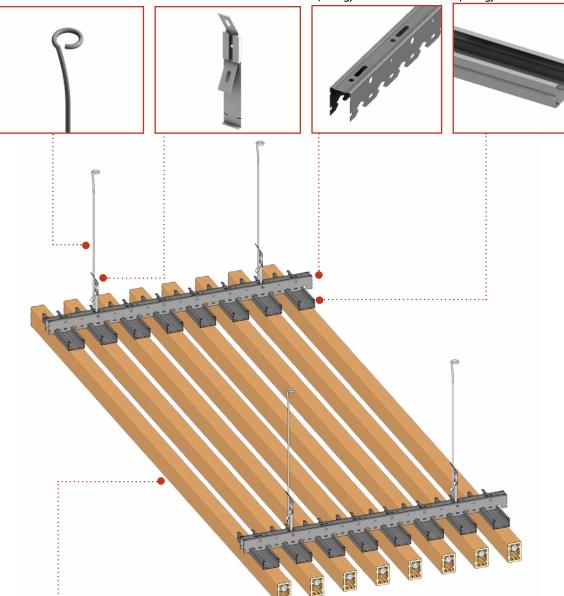
LIST OF COMPONENTS

HANGERS L=1000 mm BENT AT 90° (Fixings not included)

HOOKS WITH SPRINGS FOR HANGERS

(c) 'SNAP' GUIDES IN BLACK PAINTED **STEEL** 28x40 mm 0,55 kg/m

(d) C PROFILES OF CONNECTION IN BLACK PAINTED STEEL 48x26,5 mm 0,56 kg/m











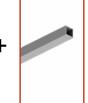
SECT. 60X40 mm (1,45 Kg/m *) SECT. 75X40 mm (1,65 Kg/m *) SECT. 90X40 mm (2,10 kg/m *)



LOUVERS IN NOVOWOOD WPC

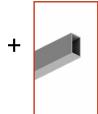
SECT. 162X40 mm (2,99 kg/m *)

* Weight in Novowood standard formulation





TUBULAR IN ALUMINIUM SECT. 20X20 mm TH. 1,5 mm (0,295 kg/m)

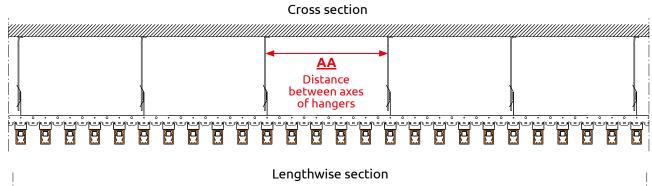


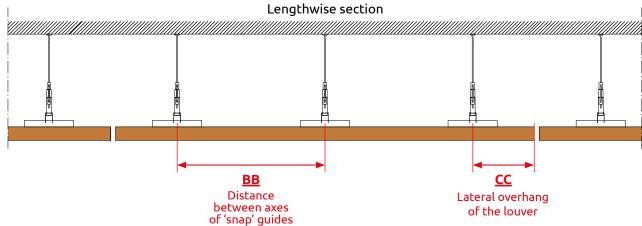
INNER FRAME

TUBULAR IN ALUMINIUM SECT. 45X25 mm TH. 2 mm (0,713 kg/m)

DIMENSIONS AND DISTANCES BETWEEN AXES

(ONLY FOR USE IN INDOOR SPACES)





Novo-Up with Infinity 60

E 40 mm 60 mm

AA MAXIMUM 500 mm*

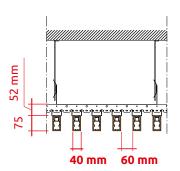
MAXIMUM 2.000 mm*

MAXIMUM 250 mm*

Weight of wpc louvers (Novowood standard formulation) + inner frames with distance between axes 100mm

 \simeq 17,45 Kg/sqm

Novo-Up with Infinity 75



MAXIMUM500 mm*

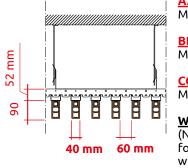
MAXIMUM 2.000 mm*

MAXIMUM 250 mm*

Weight of wpc louvers (Novowood standard formulation) + inner frames with distance between axes 100mm

≥ 19,45 Kg/sqm

Novo-Up with Infinity 90



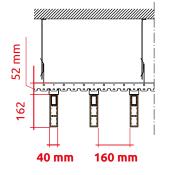
MAXIMUM 500 mm*

MAXIMUM 1.500 mm*

CC MAXIMUM 250 mm*

Weight of wpc louvers (Novowood standard formulation) + inner frames with distance between axes 100mm \simeq 23,95 Kg/sqm

Novo-Up with Infinity 162



MAXIMUM 500 mm*

MAXIMUM 2.000 mm*

MAXIMUM 250 mm*

Weight of wpc louvers (Novowood standard formulation) + inner frames with distance between axes 200mm

 \simeq 18,52 Kg/sqm

N.B. The distances between axes of the structure must in any case be evaluated by a qualified designer according to the project specifications.

THE AIM OF THIS DOCUMENT IS TO PROVIDE OUR CLIENTS WITH GENERAL RECOMMENDATIONS

IPERWOOD EXPRESSLY RECOMMENDS THAT OUR CLIENTS AND/OR DESIGNERS USE THE CONSULTANCY SERVICES OF AN ENGINEER OR DESIGNER QUALIFIED IN TERMS OF THE SPECIFIC APPLICATION AND INSTALLATION, AS WELL AS IN TERMS OF COMPLIANCE WITH THE PROJECT REQUIREMENTS, APPLICABLE CODES AND CURRENT REGULATIONS AND LEGISLATION, AND TESTING REGULATIONS AND STANDARDS

IN ALL CIRCUMSTANCES PLEASE CHECK CURRENT LOCAL CODES AND PROJECT REQUIREMENTS TO ENSURE THEIR CORRECT APPLICATION.

IMPORTANT NOTES

CORRECT USE OF THE MATERIAL



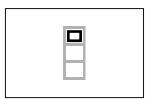
Novowood Wood Plastic Composite products are cladding materials that, despite their mechanical strenght characteristics, must always be laid on a supporting substructure of a suitable size.

FIXINGS BETWEEN SUBCONSTRUCTION FRAMEWORK AND SUBSTRATE



It is necessary to evaluate the fixing system which is more suitable according to the typology of substrate and the loads.

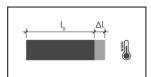
ALUMINIUM STIFFENING CORE



Each profile has 1 aluminium alloy stiffening core of a suitable diameter with respect to the cavity of the profile, that is supplied in the same length of the sunshade. It is advised to reduce the length of about 50mm less than that of the sunshade, to allow the housing of the sealing plugs (if present).

The stiffening core must be placed inside the cavity that is closer to the subconstruction framework, in order to ensure fixing on the metal profile.

THERMAL EXPANSION



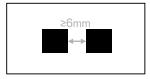
Wood plastic composite is subject to slight thermal expansion due to the presence of a small amount of HDPE plastic in its mix. The expansion index defined in the data sheet is equal to 0.04 mm/m/°C.

PRE-DRILLING ON WPC



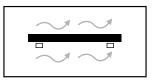
In order to allow the natural expansion of Wood Plastic Composite (expansione index equal to 0.04 mm/m/°C) it is necessary to create a prehole on the sunshade profile, 6mm bigger than the screw size.

DISTANCE BETWEEN HEADS OF LOUVERS



In order to allow the natural expansion of Wood Plastic Composite (expansione index equal to 0.04 mm/m/ $^{\circ}$ C) a distance of \geq 6 mm must be left between the heads of the louvers.

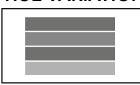
VENTILAZIONE E INTERCAPEDINE



It is essential to ALWAYS leave an airspace between the slats and the supporting surface to allow ventilation.

In Novo-Up system the 'snap' guides fulfil this need.

HUE VARIATION OF DIFFERENT LOTS



Novowood is a wood plastic composite produced by extrusion, therefore it is possible to have little hue variations between different lots produced.

It is advisabile to lay the material picking up staves from different pallets.

PRELIMINARY OPERATIONS

INSTALLATION LAYOUT

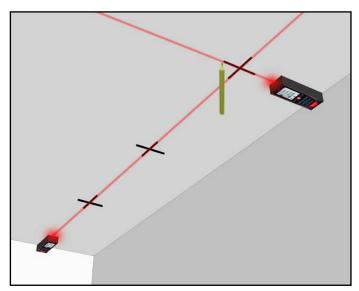


Novo-Up system may include the assembling of some components in Novowood production plants. In this case the client must first of all get in touch with Novowood technical department who will elaborate an installation layout.

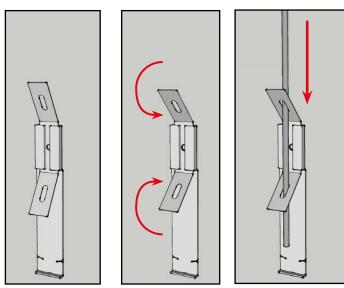
STEP BY STEP INSTALLATION GUIDE

1 INSTALLATION OF HANGERS (IF INCLUDED)

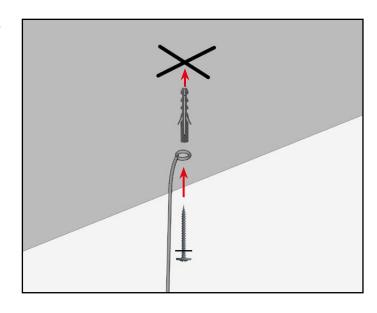
Mark on the ceiling the positioning of 'snap' 1.1 guides and consequently of the hangers.



Insert the hooks with springs on the 1.2 hangers. It is sufficient to apply a light pressure on the spring to let the hanger in the hook. Releasing the spring, the bar of the hook will stop in position.

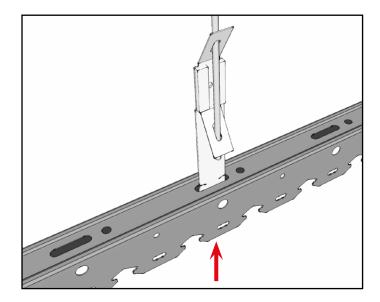


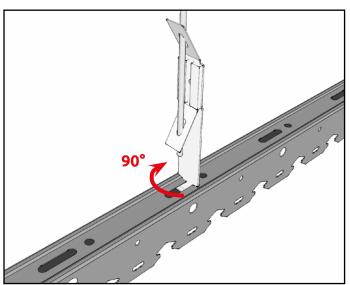
Fix the hangers to the ceiling using fixings 1.3 which are suitable for the existing bearing structure.



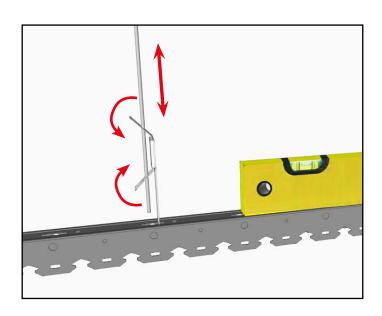
2.A INSTALLATION OF 'SNAP' GUIDES (ON HANGERS)

2.A.1 Attach the 'snap' guides to the hooks of the hangers. To do so it will be necessary to insert the hook in the hole of the 'snap' guide and turn it 90 degrees, allowing the interlocking.



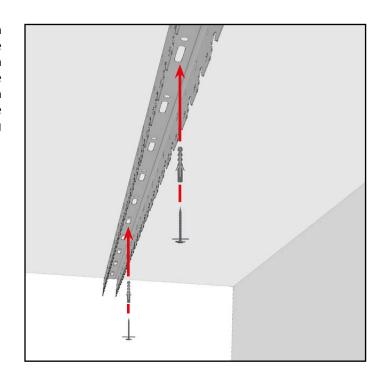


2.A.2 Regulate the springs bringing the guides to the level.



2.B INSTALLATION OF 'SNAP' GUIDES (DIRECTLY TO THE CEILING)

2.B.1 Fix the guides to the bearing structure with a distance between fixings equal to the distance between axes AA (the same which should be applied to the hangers, please see page 3), using the designated holes on the guides. The fixings (not included in the supply) must be suitable for the existing bearing strucutre.



3 INSTALLATION OF THE LOUVERS

3.1 THIS STEP IS NECESSARY ONLY IN CASE

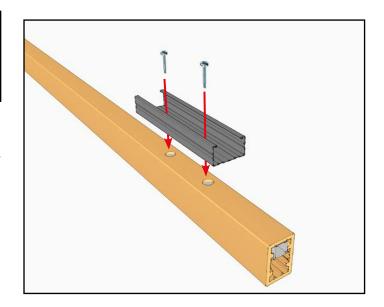
NOVOWOOD HASN'T PREVIOUSLY

ASSEMBLED THE C PROFILES OF

CONNECTION TO THE INNER FRAMES OF

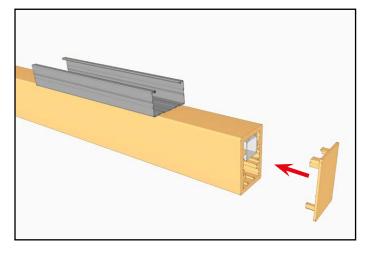
Fix the steel C profiles of connection to the inner aluminium frames of the louvers, with proper fixings. In order to allow the natural expansion of Wood Plastic Composite (expansion index equal to 0,04 mm/m/°C) it is necessary to make a prehole on the louver 6mm bigger than the size of the screw/rivet.

THE LOUVERS

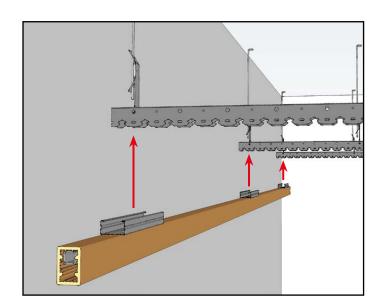


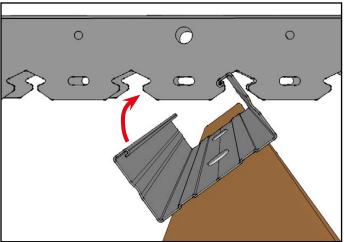
3.2 OPTIONAL

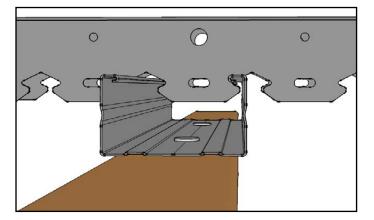
Apply the **end caps** (if included) to the louvers with the designated glue. Once the caps are applied, it is recommended to use paper tape to keep them in position. Carefully remove the paper tape only after the hardening of the adhesive (about 24 hours). It is necessary to previously reduce the inner aluminium frames of about 50mm less than the louvers, in order to allow the housing of the end caps.



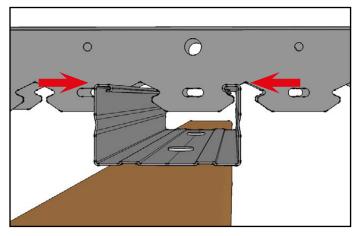
3.3 Once the installation of the 'snap' guides is completed, interlock onto them the C profiles, which were previously fixed to the louvers.







To enhance the interlocking apply a gentle pressure to the upper sides of the C, as illustrated in the adjacent picture.



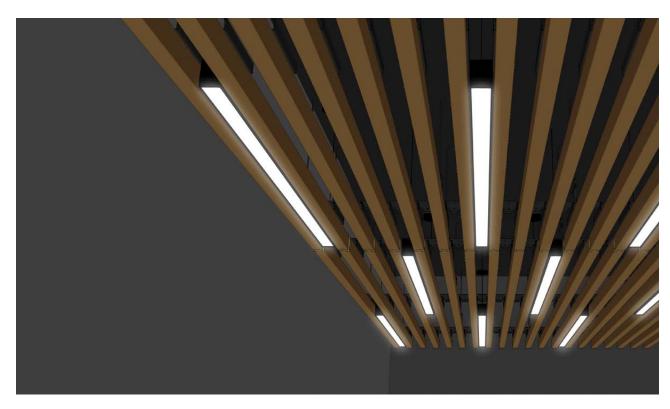
Install all the louvers until the false ceiling is completed. 3.4



3.5 LED **OPTIONAL** LAMPS FOR NOVO-UP SYSTEM

LED lamps are available for NOVO-UP system upon request. They are to be installed in the empty spaces between louvers.

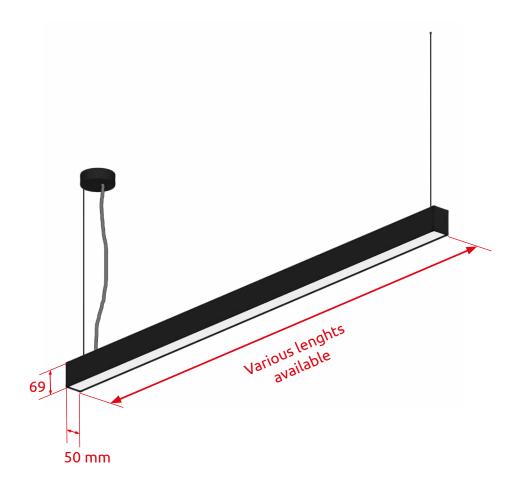
For the installation of the lamps, please see the designated laying instructions.

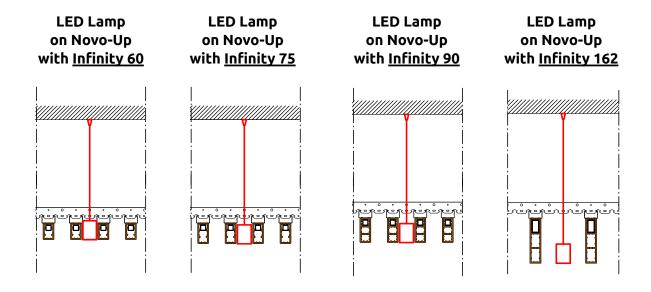


OPTIONAL LED LAMPS FOR NOVO-UP SYSTEM

FEATURES

Linear LED luminaire. Body in extruded aluminium painted in black. Polycarbonate opaline optics.





For the installation of the lamps, please see the designated laying instructions.

INFORMATION ON NOVOWOOD'S LIABILITY

The distances to be observed and the method of installation will be evaluated according to the needs of the client and the contractor during laying. The company does not assume any liability for negligence in the installation of NOVOWOOD products.

Please check possible updates of the manuals on the website www.novowood.it in the download section.

NOTES		



Iperwood S.r.l. Società Benefit a socio unico

Via E. da Rotterdam, 27-29 44122 - Ferrara - (FE)

+39 0532 732737 info@novowood.it www.novowood.it