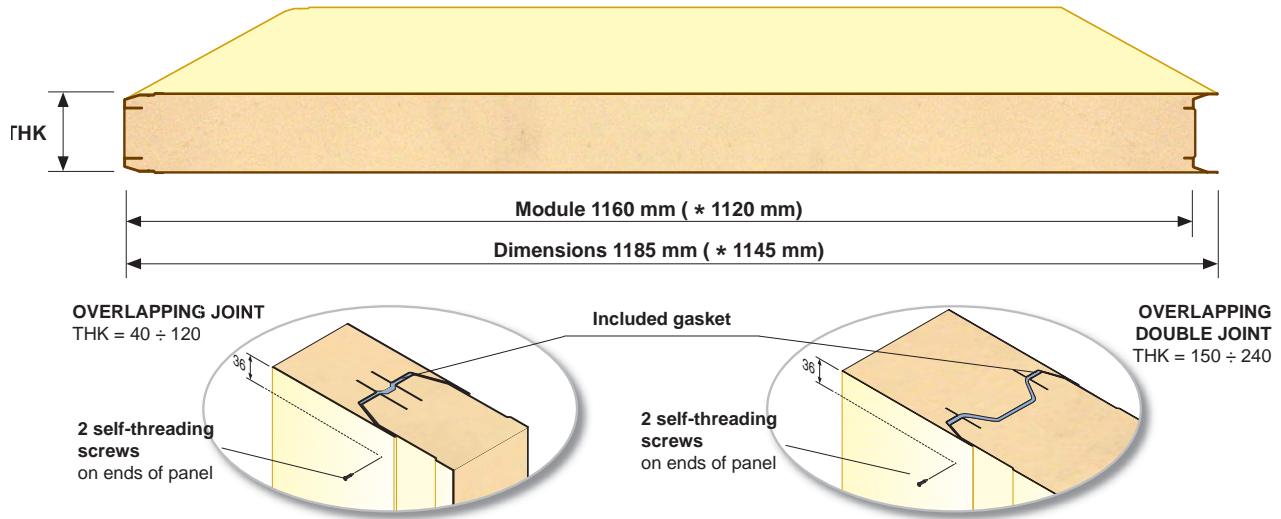


Sandwich panels with tongue-and-groove joint for the execution of cold rooms at positive and negative temperature. Designed for high performances of thermal insulation, mechanical strength, aesthetic value, hygiene and rapid assembling. \*Reduced module (\*GS112L) for loading in containers.



|                          |   |
|--------------------------|---|
| <b>Module</b>            | Usable width = 1160 - *1120.  |
| <b>Dimensions</b>        | Minimum length: 2000 mm, maximum length: 14000 mm.  |
| <b>Aspect</b>            | Standard: smooth on two faces.  |
| <b>Insulation</b>        | Standard rigid polyurethane foam (RPU), Density 41 kg/m <sup>3</sup> ± 10%, initial thermal conductivity λ 0.023 W/m K, no CFC.   |
| <b>Reaction to fire</b>  | Euroclass D s3 d0 EN 13501-1.   |
| <b>Overlapping joint</b> | The shape of the tongue-and-groove joint enables an overlapping of the lip of the groove side over the tongue side which eliminates any fissures and ensures an accurate sanitary finish. The tongue-and-groove joint is single up to thickness 120, double from 150 to 240 with interposed gasket included in the groove side (excluded thickness 40).   |
| <b>Standard coating</b>  | PR: white pre-painted hot galvanized steel sheet, colour Ral 9010, Polyester varnish 25 μ, Colour diff. ΔE < 1.   |
| <b>Optional coatings</b> | ZN: Hot galvanized metal sheet with Senzmir system.<br>PL: Hot galvanized metal sheet plasticized with PVC 110 μ white film colour Ral 9010 with protective film.<br>PT: Heat galvanized sheet metal, pre-coated and co-laminated with PET film, for a total coating of 45 μ, in RAL 9010 white.<br>IX: AISI 304 2B stainless steel with protective film.<br>PX: AISI 304 stainless steel plasticized with PVC 110 μ white film colour Ral 9010 with protective film.<br>VX: AISI 304 stainless steel, white pre-painted sheet, colour Ral 9010, Polyester varnish 25 μ, Colour diff. ΔE < 1. |
| <b>Tolerances</b>        | Thickness and flatness of metal sheet according to UNI - EN -10143.<br>Density of insulation ± 10%.<br>Thickness of panel ± 2%.<br>Non-adherence of RPU to metal sheet max 0,5%.<br>Steel waviness and flatness of the panel 0,6 ÷ 1,5 mm.<br>Panel length: L ≤ 3000 ± 5mm L > 3000 ± 5mm.<br>Panel width ± 2 mm.<br>Bending on panels length: 2 mm. per metre, max. 10 mm.   |

**Technical Features:**

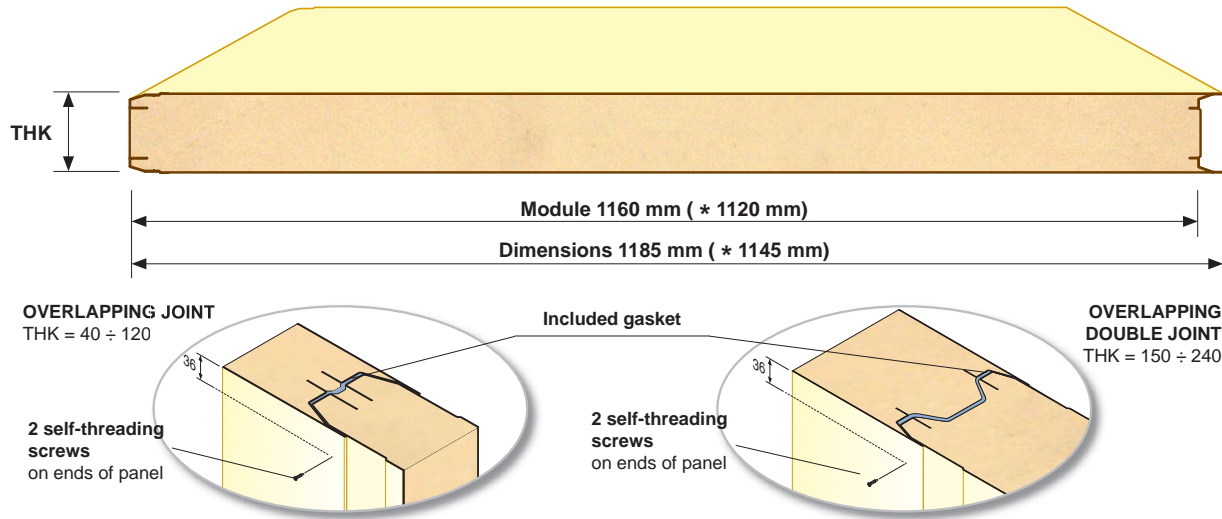
| Thk.<br>(Thickness)<br>mm | Weight<br>kg/m <sup>2</sup> | **H-max<br>m | Initial heat transmission<br>coefficient<br>K<br>W/m <sup>2</sup> K | ΔT<br>Temperature range<br>°C | ** Admissible load uniformly distributed in Kg/m <sup>2</sup> , net of own weight<br>Calculated in conformity to European standard<br>EN 14509:2007<br>Sheet metal Thk. 0.5 + 0.5 mm |     |     |     |     |     |     |     |     |     |     |     |     |     |    |      |    |      |  |
|---------------------------|-----------------------------|--------------|---|-------------------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|------|----|------|--|
|                           |                             |              |   |                               | Panel length in metres   |     |     |     |     |     |     |     |     |     |     |     |     |     |    |      |    |      |  |
|                           |                             |              |   |                               | 3  | 3,5 | 4   | 4,5 | 5   | 5,5 | 6   | 6,5 | 7   | 7,5 | 8   | 8,5 | 9   | 9,5 | 10 | 10,5 | 11 | 11,5 |  |
| 40                        | 9,7                         | 4            | 0.576   | Te 30 °C - Tl 0 °C            | 70   | 50  |     |     |     |     |     |     |     |     |     |     |     |     |    |      |    |      |  |
| 60                        | 10,5                        | 5            | 0.384   |                               | 125  | 95  | 70  | 50  |     |     |     |     |     |     |     |     |     |     |    |      |    |      |  |
| 80                        | 11,3                        | 6            | 0.288   |                               | 185  | 140 | 110 | 85  | 65  | 50  |     |     |     |     |     |     |     |     |    |      |    |      |  |
| 100                       | 12,1                        | 7            | 0.230   |                               |  | 190 | 150 | 120 | 95  | 75  | 60  | 50  |     |     |     |     |     |     |    |      |    |      |  |
| 120                       | 12,9                        | 8            | 0.192   |                               |  |     | 215 | 170 | 140 | 115 | 95  | 80  | 65  | 55  |     |     |     |     |    |      |    |      |  |
| 150                       | 14,1                        | 9            | 0.154   | Te 30 °C - Tl -20 °C          |  |     |     | 190 | 160 | 130 | 110 | 95  | 80  | 65  | 55  |     |     |     |    |      |    |      |  |
| 180                       | 15,3                        | 10           | 0.127   |                               |  |     |     |     | 200 | 170 | 145 | 125 | 105 | 90  | 75  | 65  | 55  |     |    |      |    |      |  |
| 200                       | 16,1                        | 11           | 0.115   |                               |  |     |     |     |     | 195 | 170 | 145 | 125 | 105 | 90  | 80  | 70  | 60  | 50 |      |    |      |  |
| 240                       | 17,7                        | 12           | 0.096   |                               |  |     |     |     |     |     | 215 | 185 | 160 | 140 | 120 | 105 | 90  | 80  | 70 | 60   | 50 |      |  |
|                           |                             |              |   |                               |  |     |     |     |     |     |     | 215 | 185 | 160 | 140 | 120 | 105 | 90  | 80 | 70   | 60 | 50   |  |

\* Admissible height in inside environments, without current intermediary fixing.

\*\* With ΔT 30 °C (chiller cold rooms), take into account an overload due to residual depression of 10 Kg/m<sup>2</sup>. With ΔT 50 °C (Freezer col rooms), take into account an overload due to residual depression of 30 Kg/m<sup>2</sup>.

Incold S.p.a. reserves the right to modify the technical details of this product at any time without notice.

Sandwich panels with tongue-and-groove joint for the execution of cold rooms at positive and negative temperature. Designed for high performances of thermal insulation, mechanical strength, aesthetic value, hygiene and rapid assembling. \*Reduced module (\*GS112L) for loading in containers.



|                          |   |
|--------------------------|---|
| <b>Module</b>            | Usable width = 1160 - *1120.  |
| <b>Dimensions</b>        | Minimum length: 2000 mm, maximum length: 14000 mm.  |
| <b>Aspect</b>            | Standard: smooth on two faces.  |
| <b>Insulation</b>        | Rigid poly-isocyanurate foam (PIR), Density 41 kg/m <sup>3</sup> ± 10%, initial thermal conductivity λ 0.023 W/m K, no CFC.   |
| <b>Reaction to fire</b>  | Euroclass B s2 d0 EN 13501-1.   |
| <b>Overlapping joint</b> | The shape of the tongue-and-groove joint enables an overlapping of the lip of the groove side over the tongue side which eliminates any fissures and ensures an accurate sanitary finish. The tongue-and-groove joint is single up to thickness 120, double from 150 to 240 with interposed gasket included in the groove side (excluded thickness 40).                     |
| <b>Standard coating</b>  | PR: white pre-painted hot galvanized steel sheet, colour Ral 9010, Polyester varnish 25 μ, Colour diff. ΔE < 1.   |
| <b>Optional coatings</b> | ZN: Hot galvanized metal sheet with Senzmir system.<br>IX: AISI 304 2B stainless steel with protective film.<br>VX: AISI 304 stainless steel, white pre-painted sheet, colour Ral 9010, Polyester varnish 25 μ, Colour diff. ΔE < 1.  |
| <b>Tolerances</b>        | Thickness and flatness of metal sheet according to UNI - EN -10143.<br>Density of insulation ± 10%.<br>Thickness of panel ± 2%.<br>Non-adherence of RPU to metal sheet max 0,5%.<br>Steel waviness and flatness of the panel 0,6 ÷ 1,5 mm.<br>Panel length: L ≤ 3000 ± 5mm L > 3000 ± 5mm.<br>Panel width ± 2 mm.<br>Bending on panels length: 2 mm. per metre, max. 10 mm. |

**Technical Features:**

| Thk.<br>(Thickness)<br>mm | Weight<br>kg/m <sup>2</sup> | **H-max<br>m | Initial heat transmission<br>coefficient<br>K<br>W/m <sup>2</sup> K | ΔT<br>Temperature range<br>°C | ** Admissible load uniformly distributed in Kg/m <sup>2</sup> , net of own weight<br>Calculated in conformity to European standard<br>EN 14509:2007<br>Sheet metal Thk. 0.5 + 0.5 mm |     |     |     |     |     |     |     |     |     |     |     |     |     |    |     |    |      |    |      |
|---------------------------|-----------------------------|--------------|---|-------------------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|----|------|----|------|
|                           |                             |              |   |                               | Panel length in metres   |     |     |     |     |     |     |     |     |     |     |     |     |     |    |     |    |      |    |      |
|                           |                             |              |   |                               |  |     |     |     |     |     |     |     |     |     |     |     |     |     |    |     |    |      |    |      |
|                           |                             |              |   |                               |  |     | 3   | 3,5 | 4   | 4,5 | 5   | 5,5 | 6   | 6,5 | 7   | 7,5 | 8   | 8,5 | 9  | 9,5 | 10 | 10,5 | 11 | 11,5 |
| 40                        | 9,7                         | 4            | 0.576   | Te 30 °C - Ti 0 °C            | 70   | 50  |     |     |     |     |     |     |     |     |     |     |     |     |    |     |    |      |    |      |
| 60                        | 10,5                        | 5            | 0.384   |                               | 125  | 95  | 70  | 50  |     |     |     |     |     |     |     |     |     |     |    |     |    |      |    |      |
| 80                        | 11,3                        | 6            | 0.288   |                               | 185  | 140 | 110 | 85  | 65  | 50  |     |     |     |     |     |     |     |     |    |     |    |      |    |      |
| 100                       | 12,1                        | 7            | 0.230   |                               |  | 190 | 150 | 120 | 95  | 75  | 60  | 50  |     |     |     |     |     |     |    |     |    |      |    |      |
| 120                       | 12,9                        | 8            | 0.192   |                               |  |     | 215 | 170 | 140 | 115 | 95  | 80  | 65  | 55  |     |     |     |     |    |     |    |      |    |      |
| 150                       | 14,1                        | 9            | 0.154   |                               | Te 30 °C - Ti -20 °C   |     |     |     | 190 | 160 | 130 | 110 | 95  | 80  | 65  | 55  |     |     |    |     |    |      |    |      |
| 180                       | 15,3                        | 10           | 0.127   |                               |  |     |     |     |     | 200 | 170 | 145 | 125 | 105 | 90  | 75  | 65  | 55  |    |     |    |      |    |      |
| 200                       | 16,1                        | 11           | 0.115   |                               |  |     |     |     |     |     | 195 | 170 | 145 | 125 | 105 | 90  | 80  | 70  | 60 | 50  |    |      |    |      |
| 240                       | 17,7                        | 12           | 0.096   |                               |  |     |     |     |     |     |     | 215 | 185 | 160 | 140 | 120 | 105 | 90  | 80 | 70  | 60 | 50   |    |      |

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