



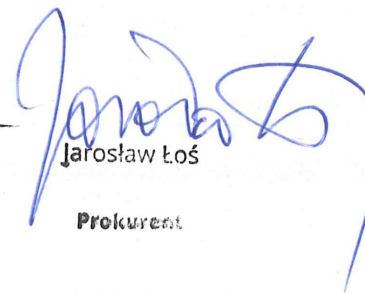
# DECLARATION OF PERFORMANCE OF THE „ARPANEL” SANDWICH PANEL

NO. DWU/S PIR/02/2022/EN

|   |   |   |
|---|---|---|
| 1 | Name and address of manufacturer  | Adamietz Sp. z o.o.<br>47 – 100 Strzelce Opolskie<br>ul. Braci Prankel 1<br>Poland  |
| 2 | Unique identification code of the product-type  | ARPANEL S 40 PIR, ARPANEL S 60 PIR, ARPANEL S 80 PIR,<br>ARPANEL S 100 PIR SANDWICH PANELS with a polyisocyanurate<br>foam core                               |
| 3 | Intended use, in accordance with the applicable<br>harmonized technical specification | Metal faced insulating panel for use in buildings as external walls,<br>partitions and ceilings.  |
| 4 | System of assessment and verification of constancy<br>of performance:                 | System 3  |
| 5 | Harmonized standard   | PN-EN 14509:2013 - 12   |
| 6 | Notified body   | INSTYTUT TECHNIKI BUDOWLANEJ Warsaw - No. 1488<br>IMA Materialforschung und Anwendungstechnik GmbH Dresden –<br>No. 2456<br>Fires s.r.o. Batizovce – No. 1396 |
| 7 | Declared performance  | Annex 1.  |

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

  
Jarosław Łoś  
Prokurent

Strzelce Opolskie, 28-11-2022



### Annex 1 to the Declaration of performance NO. DWU/S PIR/02/2022/EN

|  |  |   |  |                          |                          |                          |
|--|--|---|--|--------------------------|--------------------------|--------------------------|
| Panel thickness [mm]   |  | 40  | 60   | 80                       | 100                      |                          |
| Dimensional tolerances   |  | ± 2 mm  |  |                          |                          |                          |
| Mass [kg/m <sup>2</sup> ]  |  | 9,6   | 10,4   | 11,2                     | 11,9                     |                          |
| Density of core material (PIR foam) [kg/m <sup>3</sup> ]   |  | 40±3  |  |                          |                          |                          |
| External/Internal Facing - Steel grade   |  | S280GD+Z; S250GD+Z; S220GD+Z                          |  |                          |                          |                          |
| Coating type   |  | SP25, Food Safe (PVC), PRISMA, HPS, HDX, PVDF, PUR/PA |  |                          |                          |                          |
| Thickness of facing material [mm]  |  | External: 0,5 - 0,7                                   |  | Internal: 0,4 - 0,7      |                          |                          |
| Facing profile   |  | External: G, L, M8, M14                               |  | Internal: G, L           |                          |                          |
| Cross panel tensile strength f <sub>ct</sub> [kPa]   |  | 100   | 100  | 100                      | 100                      |                          |
| Compressive strength (core) f <sub>cc</sub> [kPa]  |  | 100   | 100  | 100                      | 100                      |                          |
| Shear strength (core) f <sub>cv</sub> [kPa]  |  | 150   | 120  | 120                      | 120                      |                          |
| Shear modulus (core) G <sub>c</sub> [MPa]  |  | 3,7   | 3,1  | 3,1                      | 3,1                      |                          |
| Creep coefficient  |  | t= 2.000 h  | 3,0  |                          |                          |                          |
|  |  | t= 100.000 h  | 5,0  |                          |                          |                          |
| Wrinkling stress [MPa]   | in span  | external face   | M8/M14:148<br>L:134 G:67   | M8/M14:160<br>L:134 G:63 | M8/M14:172<br>L:134 G:63 | M8/M14:183<br>L:134 G:63 |
|  |  | external face >80°C                                   | M8/M14:120<br>L:109 G:54   | M8/M14:130<br>L:109 G:51 | M8/M14:139<br>L:109 G:51 | M8/M14:149<br>L:109 G:51 |
|  |  | internal face   | L:134 G:67<br>M20:184  | L:134 G:63<br>M20:184    | L:134 G:63<br>M20:184    | L:134 G:63<br>M20:184    |
|  | At central support   | external face   | M8/M14:118<br>L:101 G:54   | M8/M14:123<br>L:98 G:44  | M8/M14:128<br>L:96 G:44  | M8/M14:132<br>L:93 G:44  |
|  |  | external face >80°C                                   | M8/M14:96<br>L:81 G:43   | M8/M14:100<br>L:79 G:36  | M8/M14:104<br>L:77 G:36  | M8/M14:107<br>L:75 G:36  |
|  |  | internal face   | L:121 G:60<br>M20:156  | L:119 G:54<br>M20:150    | L:118 G:54<br>M20:145    | L:116 G:54<br>M20:139    |
|  | Correction factors for the thickness of the facing           |   | t=0,6 mm for M8/14; 0,85 for M20; 0,83 for L; 0,84<br>t=0,7 mm for M8/14;0,76 for M20;0,74 for L; 0,75 |                          |                          |                          |
|  | Thermal conductivity λ <sub>D</sub> [W/m*K]                  |   | 0,022  |                          |                          |                          |
|  | Thermal transmittance U <sub>d,s</sub> [W/m <sup>2</sup> *K] |   | 0,58   | 0,37                     | 0,27                     | 0,22                     |
| Reaction to fire   |  | B-s1,d0   |  |                          |                          |                          |
| Fire resistance  | Vertical   | NPD   | E 15 / EI 15   |                          | E 30 / EI 30 / EW 30     |                          |
|  | Horizontal   | NPD   |  | E 20 / EI 20 / EW20      | E 30 / EI 30 / EW 30     |                          |
|  | Ceiling  | NPD   | EI 15 (a←b)  |                          | EI 30 (a←b)              |                          |
| Water permeability [class]   |  | A   |  |                          |                          |                          |
| Air permeability   | Positive pressure  | C = 0,2630; n = 0,5313                                |  |                          |                          |                          |
|  | Negative pressure  | C = 0,0227; n = 0,4764                                |  |                          |                          |                          |
| Airborne sound insulation R <sub>w</sub> (C, Ctr) [dB]   |  | 25 (-2;-4)  |  |                          |                          |                          |
| Sound absorption α <sub>w</sub>  |  | 0,15  |  |                          |                          |                          |
| <b>Additional performance not included in the list of relevant clauses in accordance with PN-EN 14509:</b> |  |   |  |                          |                          |                          |
| Parameter  |  | Value   |  |                          |                          |                          |
| Fire-spread  |  | non-fire spreading                                    |  |                          |                          |                          |

More details about field of application of fire resistance results are shown in Technical Documentation.