



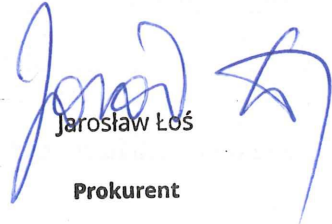
# DECLARATION OF PERFORMANCE OF THE „ARPANEL” SANDWICH PANELS

NO. DWU/CH 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 CH 120 PIR, ARPANEL CH 140 PIR, ARPANEL CH 160 PIR, ARPANEL CH 200 PIR SANDWICH PANELS with polyisocyanurate foam core.                                  |
| 3 | Intended use, in accordance with the applicable harmonized technical specification | Metal faced insulating panel for use in buildings as external walls, partitions and ceilings.  |
| 4 | System of assessment and verification of constancy 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 – 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/CH PIR/02/2022/EN**

|  |   |   |  |                          |                          |                          |
|--|---|---|--|--------------------------|--------------------------|--------------------------|
| Panel thickness [mm]   |   | 120   | 140  | 160                      | 200                      |                          |
| Dimensional tolerances   |   | ± 2 %   |  |                          |                          |                          |
| Mass [kg/m <sup>2</sup> ]  |   | 12,6  | 13,4   | 14,2                     | 15,7                     |                          |
| 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, M20      |                          |                          |
| Cross panel tensile strength $f_{ct}$ [kPa]  |   | 100   | 98   | 95                       | 90                       |                          |
| Compressive strength (core) $f_{cc}$ [kPa]   |   | 100   | 100  | 100                      | 100                      |                          |
| Shear strength (core) $f_{cv}$ [kPa]   |   | 120   | 113  | 105                      | 90                       |                          |
| Shear modulus (core) $G_c$ [MPa]   |   | 3,1   | 2,9  | 2,7                      | 2,3                      |                          |
| Creep coefficient  |   | t= 2.000 h  | 3,0  |                          |                          |                          |
|  |   | t= 100.000 h  | 5,0  |                          |                          |                          |
| Wrinkling stress [MPa]   | in span   | external face   | M8/M14:195<br>L:134 G:63   | M8/M14:195<br>L:129 G:61 | M8/M14:195<br>L:124 G:60 | M8/M14:195<br>L:113 G:57 |
|  |   | external face<br>>80°C                                | M8/M14:158<br>L:109 G:51   | M8/M14:158<br>L:105 G:50 | M8/M14:158<br>L:101 G:49 | M8/M14:158<br>L:92 G:46  |
|  |   | internal face   | L:134 G:63<br>M20:184  | L:129 G:62<br>M20:177    | L:124 G:60<br>M20:169    | L:113 G:57<br>M20:154    |
|  | At central support                                    | external face   | M8/M14:137<br>L:90 G:44  | M8/M14:132<br>L:85 G:42  | M8/M14:127<br>L:79 G:39  | M8/M14:117<br>L:68 G:34  |
|  |   | external face<br>>80°C                                | M8/M14:111<br>L:73 G:36  | M8/M14:107<br>L:69 G:34  | M8/M14:103<br>L:64 G:32  | M8/M14:95<br>L:55 G:28   |
|  |   | internal face   | L:114 G:54<br>M20:133  | L:108 G: 52<br>M20:123   | L:102 G:50<br>M20:113    | L:90 G:46<br>M20:92      |
|  | 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 $\lambda_D$ [W/m*K]              |   | 0,022  |                          |                          |                          |
|  | Thermal transmittance $U_{d,s}$ [W/m <sup>2</sup> *K] |   | 0,18   | 0,16                     | 0,14                     | 0,11                     |
| Reaction to fire   |   | B-s1,d0   |  |                          |                          |                          |
| Fire resistance*   | Vertical  | E 30 / EI 30  |  |                          | E 60 / EI 45 / EW 60     |                          |
|  | Horizontal  | E 30 / EI 30 / EW 30                                  |  |                          | E 45 / EI 45 / EW 45     |                          |
| 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 $R_w$ (C, Ctr) [dB]  |   | 24 (-2;-4)  |  |                          |                          |                          |
| Sound absorption $\alpha_w$  |   | 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                                    |  |                          |                          |                          |
| $\lambda_{design}$ [W/m*K] (0°C)   |   | 0,021   |  |                          |                          |                          |
| $U_{d,s}$ [W/m <sup>2</sup> *K] (0°C)  |   | 0,17  | 0,15   | 0,13                     | 0,10                     |                          |

\*The classification is valid in end use as external and internal walls