

DECLARATION OF PROPERTIES no. 1312 NOVATOP OPEN

Identification code
of the product type:

12SM

Intended use:

The panels are designed as bearing elements in building structures and timber assemblies, such as wall, ceiling and roof elements. The panels are designed only in operation classes 1 and 2 in accordance with EN 1995-1-1/A1.

Manufacturer:

AGROP NOVA a. s., Ptenský Dvorek 99, 798 43 Ptení, the Czech Republic,
Telephone: +420 582 319 235, Tax ID: CZ26243237

The system of assessment and
verification of properties:

System 1

European document
for assessment:

ETAG 019 - Prefabricated wood-based load-bearing sandwich panels

European Technical Assessment:

ETA 15/0209 of 04/28/2015

Technical Assessment
Body:

Technický a zkušební ústav stavební Praha, s.p.
(Technical and Test Institute for Construction Prague)

The notified body:

Technický a zkušební ústav stavební Praha, s.p.
(Technical and Test Institute for Construction Prague)

Declared properties of the materials used		The testing method
Density	490 kg/m ³	ČSN 49 0108
Reaction to fire Walls, ceilings, roofs	D-s2, d0	EN 13501-1 + A1
Factor of diffusion resistance (μ)	(dry/wet)	
Solid wood panels (SWP)	70/200	EN ISO 10456
Solid wood panels (SWP)	1/1	EN ISO 10456
Wooden fibreboard (WF)	5/3	EN ISO 10456
Design value of thermal conductivity (λ)	0,13 W/mK	EN ISO 10456
Formaldehyde emission class	E1	EN 717-1

Declared properties of SWP's

Type of panel		SWP 27 Typ A 6/15/6	SWP 27 Typ B 9/9/9	SWP 33 9/15/9	SWP 60 9/42/9
Stress in the panel plane [N/mm²] (podle ČSN EN 789)					
$f_{m,0,k}$	Bending strength parallel to the fibres of the outer layers	13,9	20,3	16,8	9,7
$f_{m,90,k}$	Bending strength perpendicular to the fibres of the outer layers	17,1	10,7	14,2	21,3
$f_{t,0,k}$	Tensile strength parallel to the fibres of the outer layers	9,3	13,6	11,2	6,5
$f_{t,90,k}$	Tensile strength perpendicular to the fibres of the outer layers	11,4	7,1	9,5	14,2
$f_{c,0,k}$	Compressive strength parallel to the fibres of the outer layers	13,9	20,3	16,8	9,7
$f_{c,90,k}$	Compressive strength perpendicular to the fibres of the outer layers	17,1	10,7	14,2	21,3
$f_{v,k}$	Shear strength	3			
$E_{m,0}$	Modulus of elasticity parallel to the fibres of the outer layers	5 300	7 800	6 400	3 700
$E_{m,90}$	Modulus of elasticity parallel to the fibres of the outer layers	6 600	4 100	5 400	8 200
G	Shear modulus of elasticity	600			
Shear modulus of elasticity [N/mm²] (according to ČSN EN 789)					
$f_{m,0,k}$	Bending strength parallel to the fibres of the outer layers	25,0	28,9	27,6	20,1
$f_{m,90,k}$	Bending strength parallel to the fibres of the outer layers	10,8	6,2	8,2	15,6
$E_{m,0}$	Modulus of elasticity parallel to the fibres of the outer layers	9 600	11 100	10 500	7 700
$E_{m,90}$	Modulus of elasticity perpendicular to the fibres of the outer layers	2 300	800	1 400	4 200
$f_{v,k}$	Shear strength	1,1			
G	Shear modulus of elasticity	90			
Glued joint between the rib (SWP, BSH, LVL, DUO) and the flanges of the ELEMENT [N/mm²]				The testing method	
$f_{v,k,glue}$	Resistance to shear of SWP	4		ETAG 019	
$f_{v,k,glue}$	Resistance to shear of LVL	4,4		ETAG 019	
$f_{v,k,glue}$	Resistance to shear of KVH, DUO, TRI I-girder	1,1		ETAG 019	
$f_{v,k,glue}$	Resistance to shear of BSH	3,5		ETAG 019	

The properties of the above-stated product are in accordance with the set of declared properties. This Declaration of Properties is issued in accordance with Regulation (EU) no. 305/2011 under the sole responsibility of the aforementioned manufacturer.

Signed for and on behalf of the manufacturer:

In Ptení, on September 13, 2018



Ing. Mgr. Vladimír Crhonek
Managing Director of AGROP NOVA a.s.