

PREMIERFORM



1 Scope and field of application

Technical specification for cross-bonded plywood exterior covered with phenol-melamine film for concrete form according to EN 314-2/clas 3, EN 636-3.

2 Structure

Plywood covered with a phenolic Arclin™ Readyform 3323 which represents the industrial standard in concrete form overlay performance. This film is recently developed Medium Density Overlay (MDO) that is unlike any other existing overlay. Properties of this MDO plywood: greater resistance to mechanical damages, abrasion, moisture, extreme temperatures, breakup, and higher resistance to most common chemicals such as solvents and acids. Other issues which can affect the number of reuses of PremierForm include: good site practice, the required concrete finish, careful handling and storage.

3 Materials

3.1 Plywood

PremierForm MDO Arclin 3323 with Smooth Phenolic Reverse Edge CARB 2 FSC® certified

3.2 Surface and edges:

- Arclin™ Readyform 3323
- Arclin™ Readyform 3323 / standard brown phenolic film

Edge sealing: Water resistant paint.

4 Types of the surface structure

both sides smooth (smooth/smooth)

5 Dimensions and tolerances

5.1 Formats

2500 x 1250 mm

2440 x 1220 mm

Nominal thickness (mm)	Number of plies	Max. thickness (mm)	Pallet Panels/pallet
15	7	14,0 - 15,2	60
18	7	16,9 - 18,2	50
21	10	19,9 - 21,2	40

Tolerance acc. to EN315 ±3,5mm

5.2 Squareness: ±1mm /m acc. to PN-EN 315, PN-EN 324-2

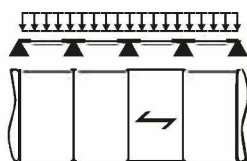
6 Distortion - cup, bow, twist

Up to 10 mm per 1 m diagonal

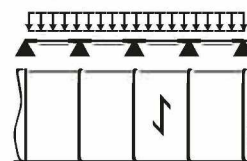
Mechanical properties of PremierForm, in standard thicknesses, moisture content

Nominal thickness (mm)	Mean modulus of elasticity bending (N/mm ²)		Characteristics strenght bending (N/mm ²)	
	Em	Em-	fm	fm-
15	7020	5400	60,1	49,9
18	5165	5535	39,8	41,5
21	5328	7520	42,0	61,1

Face grain parallel to the span (||)



Face grain perpendicular to the span (|-)



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Table 1 – M max = 0,077pl², 15mm plywood (long grain)

Loads (N/mm ²)	Plywood Deflection								
	Position of Supports (mm)								
	200	250	300	350	400	450	500	550	600
10	0,05	0,12	0,25	0,46	0,78	1,26	1,91	2,80	3,97
20	0,10	0,24	0,50	0,92	1,57	2,51	3,83	5,61	7,94
30	0,15	0,36	0,74	1,38	2,35	3,77	5,74	8,41	11,91
40	0,20	0,48	0,99	1,84	3,14	5,03	7,66	11,21	15,88
50	0,25	0,60	1,24	2,30	3,92	6,28	9,57	14,02	19,85
60	0,29	0,72	1,49	2,76	4,71	7,54	11,49	16,82	23,82

Table 2 – M max = 0,077pl², 15mm plywood (short grain)

Loads (N/mm ²)	Plywood Deflection								
	Position of Supports (mm)								
	200	250	300	350	400	450	500	550	600
10	0,06	0,15	0,31	0,57	0,98	1,57	2,39	3,50	4,96
20	0,12	0,30	0,62	1,15	1,96	3,14	4,78	7,01	9,92
30	0,18	0,45	0,93	1,72	2,94	4,71	7,18	10,51	14,88
40	0,24	0,60	1,24	2,30	3,92	6,28	9,57	14,01	19,84
50	0,31	0,75	1,55	2,87	4,90	7,85	11,96	17,51	24,81
60	0,37	0,90	1,86	3,45	5,88	9,42	14,35	21,02	29,77

Table 3 – M max = 0,077pl², 18mm plywood (long grain)

Loads (N/mm ²)	Plywood Deflection								
	Position of Supports (mm)								
	200	250	300	350	400	450	500	550	600
10	0,04	0,09	0,20	0,36	0,62	1,00	1,52	2,22	3,15
20	0,08	0,19	0,39	0,73	1,24	1,99	3,03	4,44	6,29
30	0,12	0,28	0,59	1,09	1,86	2,99	4,55	6,67	9,44
40	0,16	0,38	0,79	1,46	2,49	3,98	6,07	8,89	12,59
50	0,19	0,47	0,98	1,82	3,11	4,98	7,59	11,11	15,73
60	0,23	0,57	1,18	2,19	3,73	5,97	9,10	13,33	18,88

Table 4 – M max = 0,077pl², 18mm plywood (short grain)

Loads (N/mm ²)	Plywood Deflection								
	Position of Supports (mm)								
	200	250	300	350	400	450	500	550	600
10	0,04	0,09	0,18	0,33	0,56	0,90	1,37	2,01	2,85
20	0,07	0,17	0,36	0,66	1,13	1,80	2,75	4,02	5,70
30	0,11	0,26	0,53	0,99	1,69	2,70	4,12	6,03	8,55
40	0,14	0,34	0,71	1,32	2,25	3,61	5,49	8,05	11,39
50	0,18	0,43	0,89	1,65	2,81	4,51	6,87	10,06	14,24
60	0,21	0,52	1,07	1,98	3,38	5,41	8,24	12,07	17,09

Table 5 – M max = 0,077pl², 21mm plywood (long grain)

Loads (N/mm ²)	Plywood Deflection								
	Position of Supports (mm)								
	200	250	300	350	400	450	500	550	600
10	0,02	0,06	0,12	0,22	0,38	0,60	0,92	1,34	1,90
20	0,05	0,11	0,24	0,44	0,75	1,20	1,83	2,68	3,80
30	0,07	0,17	0,36	0,66	1,13	1,80	2,75	4,02	5,70
40	0,09	0,23	0,47	0,88	1,50	2,40	3,66	5,36	7,60
50	0,12	0,29	0,59	1,10	1,88	3,00	4,58	6,70	9,50
60	0,14	0,34	0,71	1,32	2,25	3,61	5,50	8,05	11,39

Table 6 – M max = 0,077pl², 21mm plywood (short grain)

Loads (N/mm ²)	Plywood Deflection								
	Position of Supports (mm)								
	200	250	300	350	400	450	500	550	600
10	0,02	0,04	0,09	0,17	0,29	0,47	0,71	1,04	1,48
20	0,04	0,09	0,18	0,34	0,58	0,93	1,42	2,08	2,95
30	0,05	0,13	0,28	0,51	0,87	1,40	2,14	3,13	4,43
40	0,07	0,18	0,37	0,68	1,17	1,87	2,85	4,17	5,90
50	0,09	0,22	0,46	0,85	1,46	2,33	3,56	5,21	7,38
60	0,11	0,27	0,55	1,03	1,75	2,80	4,27	6,25	8,86

7 Formaldehyde release: Formaldehyde class E1 acc. to PN-EN 636

8 Moisture content plywood: 4-12%

9 Plywood density: 585/595 kg/m³

10 Other conditions can be agreed between the parties