

Other CETRIS® Board Applications

9.1 Decking of a Slanted and Flat Roof

The CETRIS® board can be used as decking for askew and flat truss constructions, which serve as shuttering and the load-bearing construction for the final roofing. For this reason it is necessary to choose a board thickness with regard to the axial distance of the rafters and the required roof load.

The required load is provided by the roof designer, the board thickness is obtained by deduction from the table below or input into the form in the selection guide at www.cetris.cz.

Board type selection

For the cladding, it suffices to use the CETRIS® BASIC board.

Choice of board thickness, distance of the supports

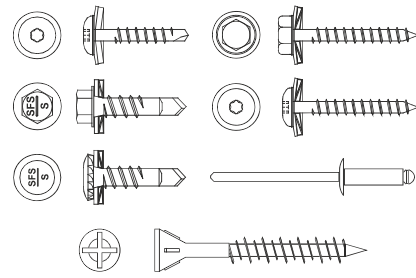
Span V (m)	Maximum vertical load in kN/m ² - for these board thicknesses:											
	18 mm	20 mm	22 mm	24 mm	26 mm	28 mm	30 mm	32 mm	34 mm	36 mm	38 mm	40 mm
0,200	38,63	47,72	57,77	68,78	80,76	93,69	107,58	101,95	115,12	129,10	143,87	159,44
0,250	24,63	30,44	36,86	43,90	51,55	59,82	68,70	65,09	73,51	82,44	91,88	101,84
0,300	17,03	21,05	25,51	30,38	35,69	41,42	47,58	45,06	50,90	57,10	63,65	70,55
0,350	12,44	15,39	18,66	22,23	26,12	30,33	34,85	32,99	37,27	41,81	46,62	51,68
0,400	8,50	11,72	14,21	16,94	19,92	23,13	26,58	25,15	28,42	31,90	35,57	39,44
0,450	5,89	8,15	10,91	13,32	15,66	18,19	20,91	19,78	22,36	25,10	27,99	31,04
0,500	4,23	5,86	7,87	10,28	12,62	14,66	16,86	15,94	18,02	20,23	22,57	25,04
0,550	3,11	4,34	5,84	7,64	9,78	12,05	13,86	13,09	14,81	16,63	18,56	20,60
0,600	2,34	3,28	4,42	5,81	7,45	9,36	11,58	10,93	12,37	13,90	15,51	17,22
0,650	1,79	2,52	3,41	4,50	5,78	7,28	9,02	9,25	10,47	11,77	13,14	14,59
0,700	1,38	1,96	2,67	3,53	4,56	5,75	7,14	7,91	8,96	10,08	11,26	12,50
0,750	1,08	1,54	2,12	2,81	3,64	4,60	5,72	6,83	7,74	8,71	9,74	10,82
0,800	0,84	1,22	1,69	2,26	2,93	3,72	4,64	5,70	6,75	7,60	8,49	9,44
0,850	0,66	0,97	1,36	1,82	2,38	3,04	3,80	4,67	5,67	6,67	7,46	8,30
0,900	0,52	0,77	1,09	1,48	1,95	2,50	3,14	3,87	4,70	5,64	6,60	7,34
0,950	0,40	0,62	0,88	1,21	1,60	2,07	2,60	3,22	3,92	4,72	5,61	6,53
1,000	0,31	0,49	0,71	0,99	1,32	1,72	2,17	2,70	3,30	3,97	4,74	5,58
1,050	0,23	0,38	0,58	0,81	1,09	1,43	1,82	2,27	2,78	3,37	4,02	4,75
1,100	0,17	0,30	0,46	0,66	0,90	1,19	1,53	1,92	2,36	2,86	3,43	4,06
1,150	0,12	0,22	0,36	0,54	0,75	0,99	1,28	1,62	2,00	2,44	2,93	3,48
1,200	0,07	0,16	0,28	0,43	0,61	0,83	1,08	1,37	1,71	2,09	2,52	3,00
1,250	0,03	0,11	0,22	0,34	0,50	0,69	0,91	1,16	1,46	1,79	2,17	2,59

of such a marked value – board not freely walkable!



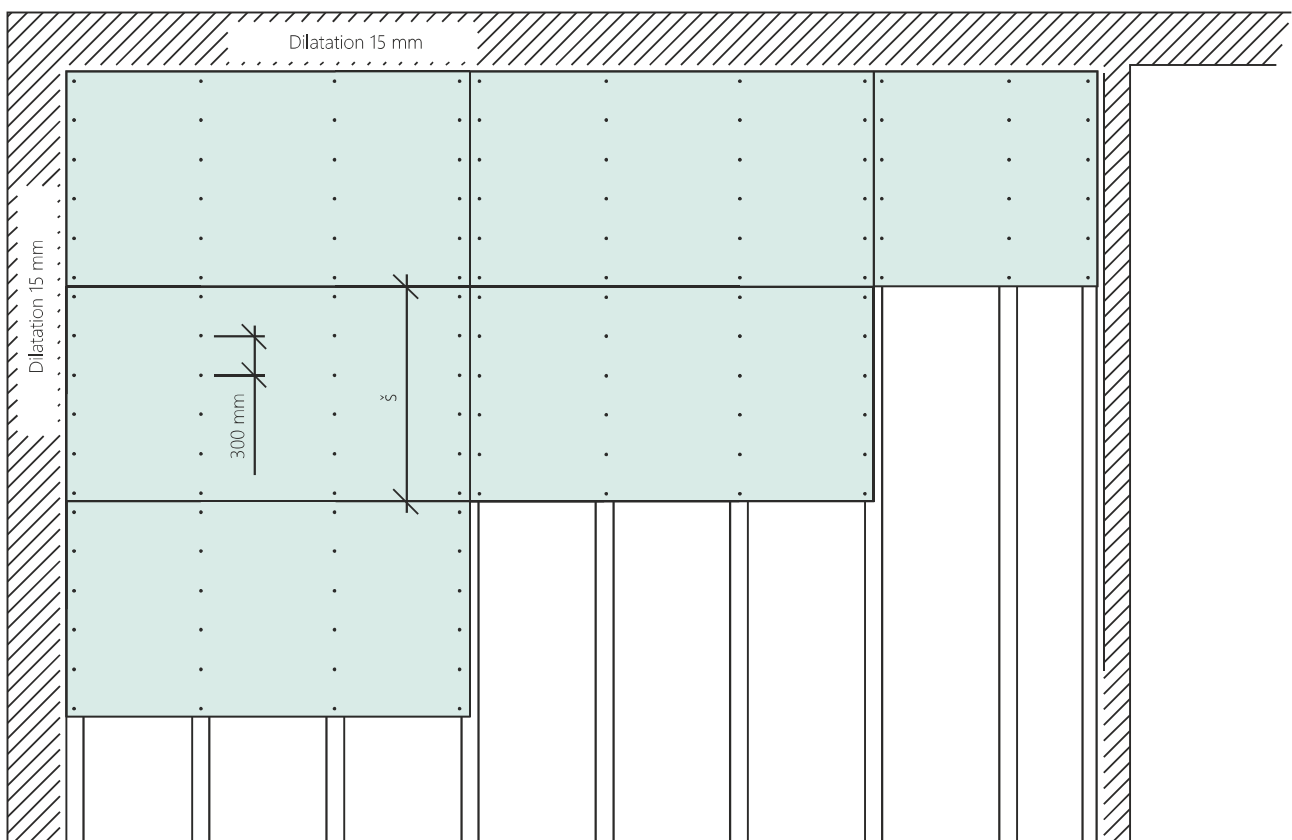
Board anchoring

CETRIS® boards are anchored mainly using visible flat head screws, the CETRIS® board is pre-drilled, the pre-drilled hole diameter is 8 mm when using screws of diameter 4–5 mm. At the centre of the board is a pre-drilled hole of same diameter as the screw used. This creates the fixed point to which the board is anchored first. Alternatively, the board may also be anchored with shearing rivets. The minimum distance of the screw from the edge is 25 mm, max. 100 mm. The mutual spacing of the screws may be maximum 300 mm. In a case where the board is under hydro insulation, it can be fixed with a sunken head screw for a pre-drilled hole that is 1.2 multiple of the screw diameter.



Laying of the boards

The boards are laid with a visible joint, perpendicular to the direction of the rafters, always laid across at least two fields between the supports (trusses).



Solution of the joints, dilatation

The joint is visible between the individual board formats and mostly remains open. If it is necessary to fill the joint, a permanently elastic filler may be used. The size of the joints depends on the CETRIS® board format (up to 1,670 – the minimum joint is 4 mm, format above 1,670 mm – minimum joint 8 mm).

Anchoring of the roofing in the roof

Anchoring may be done by means of screws or staples. The anchoring method must always be verified for a specific application. Informative values of the load capacity of the screw to shearing from the CETRIS® Cement Bonded Particleboards is given in Chapter 4.1.