

General notes on span tables for roof panels

Note the following:

- The characteristic loads are to be determined according to the terms of valid standards and eurocodes.
- Choose the minimal supporting width from wind pressure, snow load or wind suction for the respective case of application. The wind pressure that possibly needs to be taken into account may be added to the snow load for safety reasons. When doing so, the combination coefficients Ψ according to DIN EN 14509, Appendix E, Table E6 can be considered.
- Colour groups I (very light), II (light) and III (dark) – see approval.
- This span table is valid for buildings with normal interior climate (no cold store or ripening facilities).
- Valid supporting widths are stated in meters (m), support widths in millimetres (mm), see example below.
- The deflection amounts to a maximum of $L/100$ under consideration of all unfavourable loads, including long-time exposure, and to a maximum of $L/200$ for short-term exposure.
- In each case a separate proof for fixing material is required (for tensile load of wind suction and temperature, for pulling out of the subconstruction and the screw head deflection).

Example:

from snow load table (incl. wind pressure):

40	→ end support width necessary (mm)
3,44	→ valid supporting width (m)
60	→ intermediate support width necessary (mm)

from wind suction table:

5,19	→ valid supporting width (m)
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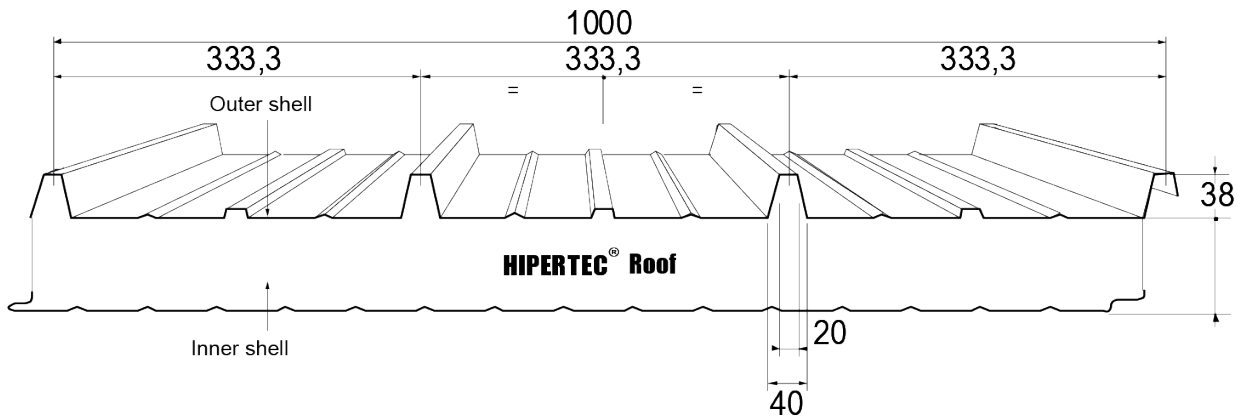
} valid supporting width = 3,44 m (lowest value of both tables)

Span table 03-06

Hipertec Roof (T/S), d = 60 mm

t_N = 0,60 / 0,45 mm, S 320 GD

Max. valid supporting widths stated in the following are attested according to approval Z-10.49-516 of November 21, 2019 in accordance with EN 14509. Instructions for the application of the table can be gathered from the front page.



Valid supporting widths [m] for snow loads

stat. system	colour group	characteristic snow load in kN / m ²									
		0,25	0,60	0,70	0,80	0,90	1,00	1,25	1,50	1,75	2,00
single span	I, II, III	40	40	40	41	42	42	44	45	46	48
		4,82	3,72	3,33	3,02	2,77	2,56	2,18	1,91	1,71	1,55
dual span	I, II, III	40	40	40	41	42	42	44	45	46	48
		4,54	3,72	3,33	3,02	2,77	2,56	2,18	1,91	1,71	1,55
multiple span	I, II, III	60	80	81	82	83	84	87	90	93	95
		4,82	3,72	3,33	3,02	2,77	2,56	2,18	1,91	1,71	1,55

stat. system	colour group	characteristic snow load in kN / m ²									
		2,25	2,50	2,75	3,00	3,25	3,50	4,00	4,25	4,50	5,00
single span	I, II, III	49	50	52	53	54	56	59	60	61	64
		1,43	1,33	1,25	1,18	1,12	1,07	0,99	0,95	0,92	0,87
dual span	I, II, III	49	50	52	53	54	56	59	60	61	64
		1,43	1,33	1,25	1,18	1,12	1,07	0,99	0,95	0,92	0,87
multiple span	I, II, III	98	101	103	106	109	111	117	119	122	128
		1,43	1,33	1,25	1,18	1,12	1,07	0,99	0,95	0,92	0,87

Valid supporting widths [m] for wind suction

stat. system	colour group	characteristic wind suction in kN / m ²									
		0,25	0,40	0,50	0,60	0,70	0,80	0,90	1,00	1,25	1,50
single span	I, II, III	4,82	4,80	4,73	3,84	3,25	2,83	2,52	2,28	1,86	1,60
dual span	I, II, III	4,54	4,54	4,54	3,84	3,25	2,83	2,52	2,28	1,86	1,60
multiple span	I, II	4,82	4,82	4,74	3,84	3,25	2,83	2,52	2,28	1,86	1,60
	III	0,54*	0,54*	0,54*	0,54*	0,54*	0,54*	0,54*	0,54*	0,54*	0,54*

stat. system	colour group	characteristic wind suction in kN / m ²									
		1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	4,00	5,00
single span	I, II, III	1,41	1,28	1,17	1,09	1,02	0,98	0,93	0,89	0,82	0,73
dual span	I, II, III	1,41	1,28	1,17	1,09	1,02	0,98	0,93	0,89	0,82	0,73
multiple span	I, II	1,41	1,28	1,17	1,09	1,02	0,98	0,93	0,89	0,82	0,73
	III	0,54*	0,54*	0,54	0,54	0,54	0,54	0,54	0,54	0,54	0,54

*) larger span tables are possible in individual cases; this must be proven in the context of a static calculation with the specific support width

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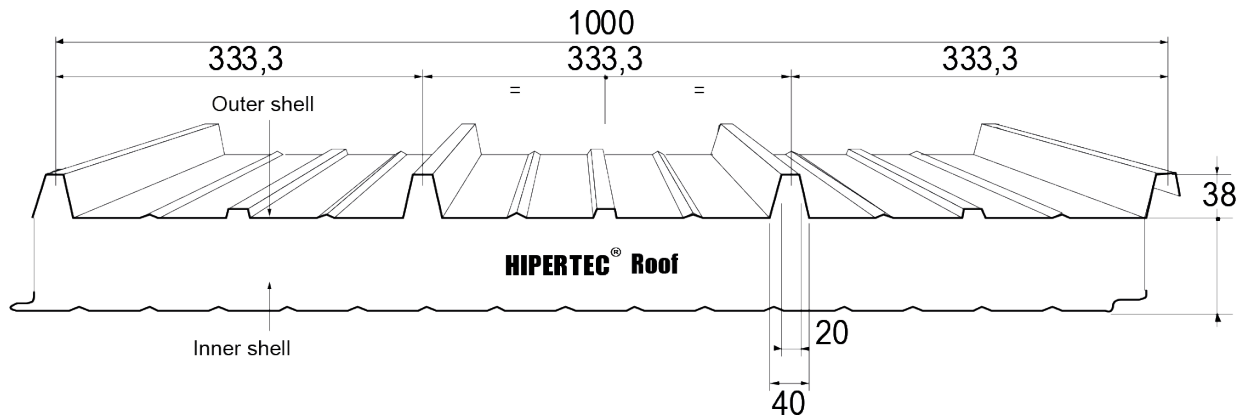


Span table 03-08

Hipertec Roof (T/S), d = 80 mm

$t_n = 0,60 / 0,45 \text{ mm}$, S 320 GD

Max. valid supporting widths stated in the following are attested according to approval Z-10.49-516 of November 21, 2019 in accordance with EN 14509. Instructions for the application of the table can be gathered from the front page.



Valid supporting widths [m] for snow loads

stat. system	colour group	characteristic snow load in kN / m ²									
		0,25	0,60	0,70	0,80	0,90	1,00	1,25	1,50	1,75	2,00
single span	I, II, III	40	49	50	50	51	51	52	54	55	56
		6,68	4,46	3,99	3,61	3,31	3,06	2,58	2,25	2,00	1,81
dual span	I, II, III	40	49	50	50	51	51	52	54	55	56
		4,78	4,46	3,98	3,61	3,31	3,06	2,58	2,25	2,00	1,81
multiple span	I, II, III	41	49	50	50	51	51	52	54	55	56
		6,82	4,46	3,98	3,61	3,31	3,06	2,58	2,25	2,00	1,81
		82	98	99	100	101	102	105	107	110	112

stat. system	colour group	characteristic snow load in kN / m ²									
		2,25	2,50	2,75	3,00	3,25	3,50	4,00	4,25	4,50	5,00
single span	I, II, III	57	59	60	61	62	63	66	67	69	71
		1,66	1,54	1,44	1,35	1,28	1,21	1,11	1,07	1,03	0,96
dual span	I, II, III	57	59	60	61	62	63	66	67	69	71
		1,66	1,54	1,44	1,35	1,28	1,21	1,11	1,07	1,03	0,96
multiple span	I, II, III	57	59	60	61	62	63	66	67	69	71
		1,66	1,54	1,44	1,35	1,28	1,21	1,11	1,07	1,03	0,96
		115	117	120	122	125	127	132	135	137	142

Valid supporting widths [m] for wind suction

stat. system	colour group	characteristic wind suction in kN / m ²									
		0,25	0,40	0,50	0,60	0,70	0,80	0,90	1,00	1,25	1,50
single span	I, II, III	7,12	7,12	6,23	5,53	4,67	4,02	3,55	3,18	2,55	2,15
dual span	I, II, III	4,78	4,78	4,78	4,78	4,67	4,02	3,55	3,18	2,55	2,15
multiple span	I, II, III	6,82	6,82	6,23	5,53	4,67	4,02	3,55	3,18	2,55	2,15

stat. system	colour group	characteristic wind suction in kN / m ²									
		1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	4,00	5,00
single span	I, II, III	1,87	1,67	1,51	1,39	1,29	1,21	1,14	1,08	0,99	0,86
dual span	I, II, III	1,87	1,67	1,51	1,39	1,29	1,21	1,14	1,08	0,99	0,86
multiple span	I, II, III	1,87	1,67	1,51	1,39	1,29	1,21	1,14	1,08	0,99	0,86

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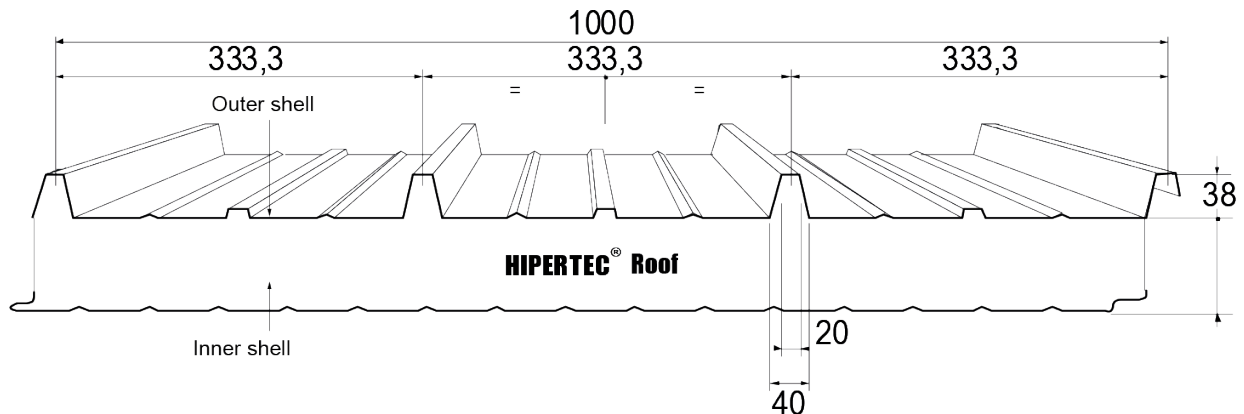


Span table 03-10

Hipertec Roof (T/S), d = 100 mm

$t_N = 0,60 / 0,45$ mm, S 320 GD

Max. valid supporting widths stated in the following are attested according to approval Z-10.49-516 of November 21, 2019 in accordance with EN 14509. Instructions for the application of the table can be gathered from the front page.



Valid supporting widths [m] for snow loads

stat. system	colour group	characteristic snow load in kN / m ²									
		0,25	0,60	0,70	0,80	0,90	1,00	1,25	1,50	1,75	2,00
single span	I, II, III	48	59	59	60	60	61	62	63	64	65
		7,55	5,18	4,64	4,20	3,85	3,56	3,00	2,60	2,31	2,08
dual span	I, II, III	40	57	59	60	60	60	62	63	64	65
		5,02	5,02	4,64	4,20	3,85	3,55	2,99	2,60	2,31	2,08
multiple span	I, II, III	45	59	59	60	60	60	62	63	64	65
		7,05	5,18	4,64	4,20	3,85	3,55	2,99	2,60	2,31	2,08
		89	117	118	119	120	121	123	126	128	130

stat. system	colour group	characteristic snow load in kN / m ²									
		2,25	2,50	2,75	3,00	3,25	3,50	4,00	4,25	4,50	5,00
single span	I, II, III	66	68	68	70	71	72	74	75	76	78
		1,90	1,76	1,63	1,53	1,44	1,37	1,24	1,19	1,14	1,06
dual span	I, II, III	66	68	68	70	71	72	74	75	76	78
		1,90	1,76	1,63	1,53	1,44	1,37	1,24	1,19	1,14	1,06
multiple span	I, II, III	66	68	68	70	71	72	74	75	76	78
		1,90	1,76	1,63	1,53	1,44	1,37	1,24	1,19	1,14	1,06
		132	135	137	139	141	144	148	151	153	157

Valid supporting widths [m] for wind suction

stat. system	colour group	characteristic wind suction in kN / m ²									
		0,25	0,40	0,50	0,60	0,70	0,80	0,90	1,00	1,25	1,50
single span	I, II, III	8,01	8,01	7,04	6,23	5,64	5,20	4,60	4,10	3,24	2,70
dual span	I, II, III	5,02	5,02	5,02	5,02	5,02	5,02	4,60	4,10	3,24	2,70
multiple span	I, II, III	7,05	7,05	7,04	6,23	5,64	5,20	4,60	4,10	3,24	2,70

stat. system	colour group	characteristic wind suction in kN / m ²									
		1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	4,00	5,00
single span	I, II, III	2,33	2,06	1,86	1,69	1,56	1,45	1,36	1,28	1,16	0,99
dual span	I, II, III	2,33	2,06	1,86	1,69	1,56	1,45	1,36	1,28	1,16	0,99
multiple span	I, II, III	2,33	2,06	1,86	1,69	1,56	1,45	1,36	1,28	1,16	0,99

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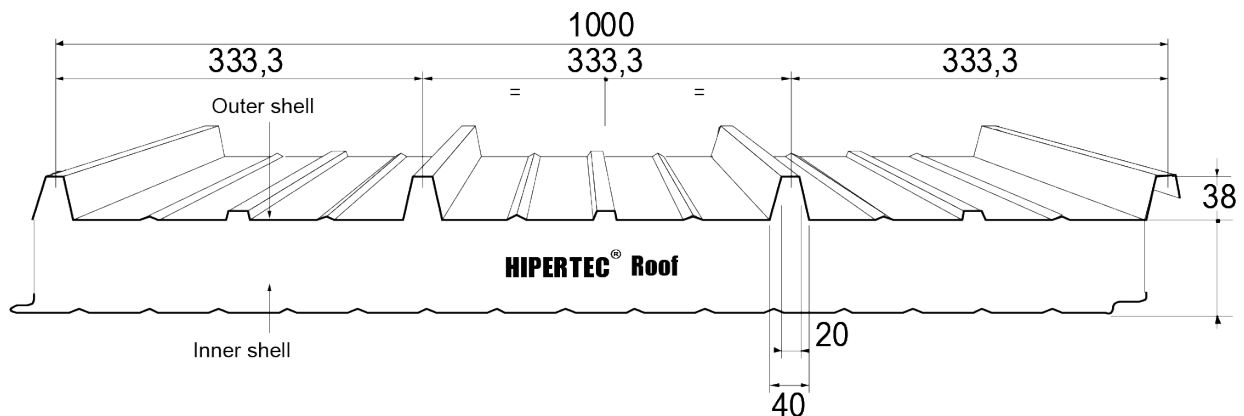


Span table 03-12

Hipertec Roof (T/S), d = 120 mm

$t_n = 0,60 / 0,45$ mm, S 320 GD

Max. valid supporting widths stated in the following are attested according to approval Z-10.49-516 of November 21, 2019 in accordance with EN 14509. Instructions for the application of the table can be gathered from the front page.



Valid supporting widths [m] for snow loads

stat. system	colour group	characteristic snow load in kN / m ²									
		0,25	0,60	0,70	0,80	0,90	1,00	1,25	1,50	1,75	2,00
single span	I, II, III	55	68	69	69	70	70	71	72	73	74
		8,35	5,89	5,28	4,79	4,38	4,05	3,41	2,96	2,62	2,36
dual span	I, II, III	40	61	65	67	69	70	71	72	73	74
		5,26	5,26	5,00	4,64	4,33	4,05	3,41	2,96	2,62	2,36
multiple span	I, II, III	48	68	69	69	70	70	71	72	73	74
		7,26	5,88	5,27	4,78	4,38	4,05	3,41	2,96	2,62	2,36
		96	136	137	138	139	140	142	145	147	149

stat. system	colour group	characteristic snow load in kN / m ²									
		2,25	2,50	2,75	3,00	3,25	3,50	4,00	4,25	4,50	5,00
single span	I, II, III	76	77	78	79	80	81	83	84	85	87
		2,15	1,98	1,84	1,72	1,62	1,53	1,38	1,32	1,27	1,17
dual span	I, II, III	76	77	78	79	80	81	83	84	85	87
		2,15	1,98	1,84	1,72	1,62	1,53	1,38	1,32	1,27	1,17
multiple span	I, II, III	76	77	78	79	80	81	83	84	85	87
		2,15	1,98	1,84	1,72	1,62	1,53	1,38	1,32	1,27	1,17
		151	153	155	158	160	162	166	168	171	174

Valid supporting widths [m] for wind suction

stat. system	colour group	characteristic wind suction in kN / m ²									
		0,25	0,40	0,50	0,60	0,70	0,80	0,90	1,00	1,25	1,50
single span	I, II, III	8,81	8,81	7,84	6,90	6,23	5,73	5,33	5,00	3,95	3,27
dual span	I, II, III	5,26	5,26	5,26	5,26	5,26	5,26	5,26	5,00	3,95	3,27
multiple span	I, II, III	7,26	7,26	7,26	6,90	6,23	5,73	5,33	5,00	3,95	3,27

stat. system	colour group	characteristic wind suction in kN / m ²									
		1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	4,00	5,00
single span	I, II, III	2,80	2,46	2,20	2,00	1,84	1,70	1,59	1,49	1,34	1,12
dual span	I, II, III	2,80	2,46	2,20	2,00	1,84	1,70	1,59	1,49	1,34	1,12
multiple span	I, II, III	2,80	2,46	2,20	2,00	1,84	1,70	1,59	1,49	1,34	1,12

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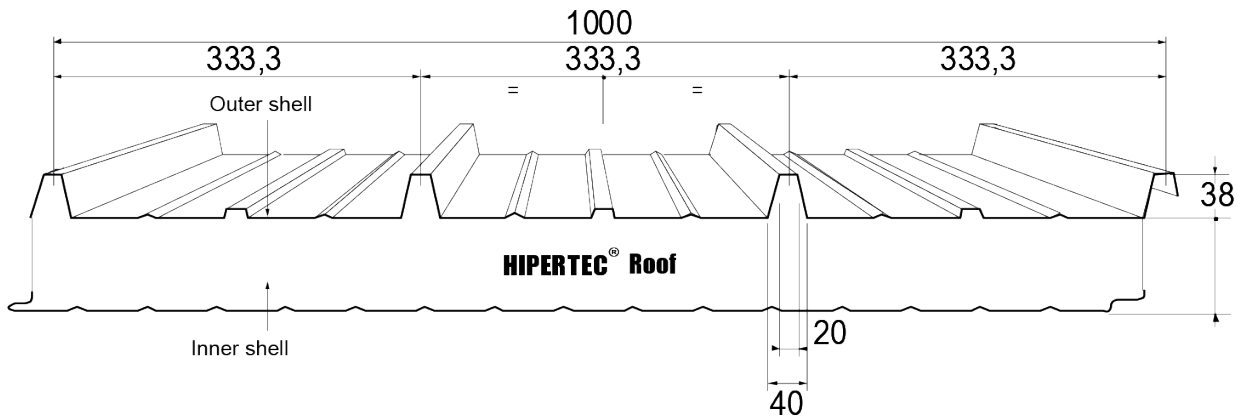


Span table 03-15

Hipertec Roof (T/S), d = 150 mm

$t_n = 0,60 / 0,45$ mm, S 320 GD

Max. valid supporting widths stated in the following are attested according to approval Z-10.49-516 of November 21, 2019 in accordance with EN 14509. Instructions for the application of the table can be gathered from the front page.



Valid supporting widths [m] for snow loads

stat. system	colour group	characteristic snow load in kN / m ²									
		0,25	0,60	0,70	0,80	0,90	1,00	1,25	1,50	1,75	2,00
single span	I, II, III	67	83	83	84	84	85	86	87	88	89
		9,36	6,86	6,16	5,60	5,14	4,75	4,00	3,47	3,07	2,76
dual span	I, II, III	43	70	72	74	76	78	81	85	88	89
		6,08	5,78	5,33	4,96	4,64	4,36	3,81	3,40	3,07	2,76
multiple span	I, II, III	58	80	83	84	84	85	86	87	88	89
		8,18	6,63	6,10	5,60	5,14	4,75	4,00	3,47	3,07	2,76
		117	161	165	168	168	169	171	173	175	177

stat. system	colour group	characteristic snow load in kN / m ²									
		2,25	2,50	2,75	3,00	3,25	3,50	4,00	4,25	4,50	5,00
single span	I, II, III	89	91	91	92	93	94	96	97	98	100
		2,51	2,31	2,14	1,99	1,87	1,76	1,59	1,52	1,45	1,34
dual span	I, II, III	89	91	91	92	93	94	96	97	98	100
		2,51	2,31	2,14	1,99	1,87	1,76	1,59	1,52	1,45	1,34
multiple span	I, II, III	89	91	91	92	93	94	96	97	98	100
		2,51	2,31	2,14	1,99	1,87	1,76	1,59	1,52	1,45	1,34
		179	181	183	184	187	188	193	195	196	201

Valid supporting widths [m] for wind suction

stat. system	colour group	characteristic wind suction in kN / m ²									
		0,25	0,40	0,50	0,60	0,70	0,80	0,90	1,00	1,25	1,50
single span	I, II, III	9,85	9,85	9,34	8,13	7,30	6,68	6,20	5,81	5,05	4,14
dual span	I, II, III	6,08	6,08	6,08	6,08	6,08	6,08	6,08	5,81	5,05	4,14
multiple span	I, II, III	8,18	8,18	8,18	8,13	7,30	6,68	6,20	5,81	5,05	4,14

stat. system	colour group	characteristic wind suction in kN / m ²									
		1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	4,00	5,00
single span	I, II, III	3,52	3,07	2,73	2,47	2,25	2,08	1,93	1,80	1,60	1,33
dual span	I, II, III	3,52	3,07	2,73	2,47	2,25	2,08	1,93	1,80	1,60	1,33
multiple span	I, II, III	3,52	3,07	2,73	2,47	2,25	2,08	1,93	1,80	1,60	1,33

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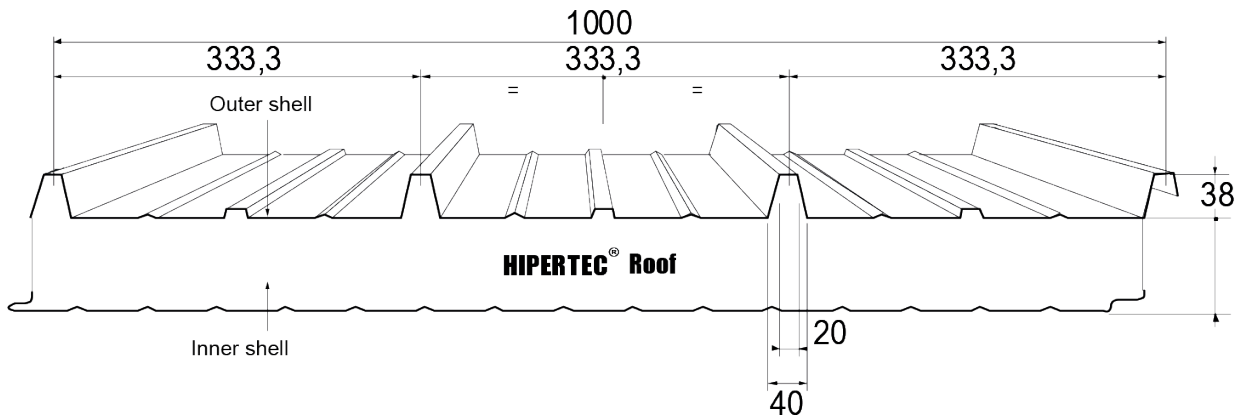


Span table 03-20

Hipertec Roof (T/S), d = 200 mm

$t_n = 0,60 / 0,45$ mm, S 320 GD

Max. valid supporting widths stated in the following are attested according to approval Z-10.49-516 of November 21, 2019 in accordance with EN 14509. Instructions for the application of the table can be gathered from the front page.



Valid supporting widths [m] for snow loads

stat. system	colour group	characteristic snow load in kN / m ²									
		0,25	0,60	0,70	0,80	0,90	1,00	1,25	1,50	1,75	2,00
single span	I, II, III	79	98	102	107	109	109	110	111	112	113
		9,88	7,57	7,13	6,76	6,32	5,86	4,96	4,30	3,81	3,42
dual span	I, II, III	51	81	83	85	87	88	92	96	99	102
		6,44	6,22	5,76	5,37	5,04	4,74	4,16	3,72	3,37	3,09
multiple span	I, II, III	67	92	94	97	98	100	104	107	110	113
		8,44	7,11	6,57	6,11	5,71	5,37	4,68	4,16	3,75	3,42
		134	184	189	193	197	200	208	214	220	225

stat. system	colour group	characteristic snow load in kN / m ²									
		2,25	2,50	2,75	3,00	3,25	3,50	4,00	4,25	4,50	5,00
single span	I, II, III	113	114	115	116	117	118	119	120	121	123
		3,11	2,86	2,64	2,46	2,30	2,17	1,94	1,85	1,76	1,62
dual span	I, II, III	104	107	109	111	114	115	119	120	121	123
		2,86	2,67	2,50	2,36	2,24	2,12	1,94	1,85	1,76	1,62
multiple span	I, II, III	113	114	115	116	117	118	119	120	121	123
		3,11	2,86	2,64	2,46	2,30	2,17	1,94	1,85	1,76	1,62
		227	229	230	232	233	236	238	240	241	245

Valid supporting widths [m] for wind suction

stat. system	colour group	characteristic wind suction in kN / m ²									
		0,25	0,40	0,50	0,60	0,70	0,80	0,90	1,00	1,25	1,50
single span	I, II, III	11,29	11,29	11,29	9,87	8,76	7,96	7,34	6,85	5,96	5,34
dual span	I, II, III	6,44	6,44	6,44	6,44	6,44	6,44	5,97	5,19	3,87	3,10
multiple span	I, II, III	8,44	8,44	8,44	8,44	8,44	7,96	7,34	6,85	5,39	4,38

stat. system	colour group	characteristic wind suction in kN / m ²									
		1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	4,00	5,00
single span	I, II, III	4,77	4,13	3,65	3,28	2,97	2,73	2,52	2,34	2,06	1,68
dual span	I, II, III	2,72	2,46	2,28	2,14	2,01	1,89	1,78	1,69	1,54	1,33
multiple span	I, II, III	3,70	3,23	2,87	2,60	2,38	2,20	2,05	1,92	1,72	1,45

Subject to changes · As of 12/20

