Tables of loads

Roof panels

TENAX TR PIR S11

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Table of loads- TENAX TR 50 PIR S11- 0,5/0,5

TENAX TR 50 PIR S11 - 0,5/0,5

Maximum allowable wind suction, kN/m²

Static scheme	Color group	Span lenght, m												
		1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7
Single span	I	6,80	3,89	2,45	1,47	1,00	0,73	0,57	0,46	-	-	-	-	-
	II	6,80	3,89	2,45	1,47	1,00	0,73	0,57	0,46	-	-	-	-	-
	III	6,80	3,89	2,45	1,47	1,00	0,68	0,33	0,14	-	-	-	-	-
Double span	I	6,71	3,42	2,13	1,47	1,00	-	-	-	-	-	-	-	-
	II	6,34	3,22	1,98	1,39	1,00	-	-	-	-	-	-	-	-
	III	6,80	2,94	1,76	1,22	0,93	-	-	-	-	-	-	-	-
Multi span	I	6,80	3,89	2,45	1,47	1,00	0,47	-	-	-	-	-	-	-
	II	6,80	3,89	2,45	1,47	1,00	0,47	-	-	-	-	-	-	-
	III	6,80	3,89	2,45	1,47	1,00	0,47	-	-	-	-	-	-	-

TENAX TR 50 PIR S11 - 0,5/0,5

Maximum allowable snow load, kN/m²

Static scheme	Color group	Span lenght, m												
		1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7
Single span	I, II, III	5,47	2,91	1,93	1,41	1,08	0,86	0,54	0,33	-	-	-	-	-
Double span	I, II, III	4,98	2,91	1,93	1,31	0,94	-	-	-	-	-	-	-	-
Multi span	I, II, III	4,98	2,91	1,93	1,41	1,08	0,86	-	-	-	-	-	-	-

Calculation in accordance with EN 14509
Roof pitch 3,0°
Load factors: EN 14509, Tab. E.8
Maximum deflection short term 1/200
Maximum deflection long term 1/100
Color groups: I(Very light), II(Light), III(Dark)
Table are made on normal internal climate (No freezers or cold rooms)
Internal temperature: summer +25 °C and winter +20 °C
External temperature: Summer +80 °C (I, II, III)
External temperature: Winter +55 °C (I), +65 °C(II), +80 °C (III)
Type and amount of screws must be calculated seperatly
Loads should be verified against the characteristic load
Minimum end support width: 40 mm
Minimum intermediate support width: 60 mm

13.01.2020

Table of loads- TENAX TR 80 PIR S11- 0,5/0,5

TENAX TR 80 PIR S11 - 0,5/0,5

Maximum allowable wind suction, kN/m²

Static scheme	Color group	Span lenght, m												
		1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7
Single span	I	8,45	5,39	3,46	2,12	1,45	1,07	0,83	0,67	0,56	0,47	0,35	-	-
	II	8,45	5,39	3,46	2,12	1,45	1,07	0,83	0,67	0,56	0,35	0,35	-	-
	III	8,45	5,39	3,46	2,12	1,45	1,07	-	-	-	-	-	-	-
Double span	I	7,28	3,73	2,39	1,72	1,33	1,07	-	-	-	-	-	-	-
	II	7,04	3,54	2,23	1,59	1,22	0,99	-	-	-	-	-	-	-
	III	6,69	3,24	1,98	1,39	1,06	0,85	-	-	-	-	-	-	-
Multi span	I	8,45	4,31	2,77	2,02	1,45	1,04	0,62						
	II	8,26	4,12	2,63	1,91	1,45	1,04	0,62						
	III	7,88	3,84	2,42	1,75	1,37	1,00	0,62						

TENAX TR 80 PIR S11 - 0,5/0,5

Maximum allowable snow load, kN/m²

Static scheme	Color group	Span lenght, m												
		1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7
Single span	I, II, III	5,85	3,42	2,45	1,91	1,54	1,27	1,05	0,85	0,60	0,42	0,28	-	-
Double span	I, II, III	5,34	3,42	2,21	1,50	1,10	0,85	-	-	-	-	-	-	-
Multi span	I, II, III	5,34	3,42	2,45	1,82	1,34	1,03	0,82	-	-	-	-	-	-

Calculation in accordance with EN 14509
Roof pitch 3,0°
Load factors: EN 14509, Tab. E.8
Maximum deflection short term 1/200
Maximum deflection long term 1/100
Color groups: I(Very light), II(Light), III(Dark)
Table are made on normal internal climate (No freezers or cold rooms)
Internal temperature: summer +25 °C and winter +20 °C
External temperature: Summer +80 °C (I, II, III)
External temperature: Winter +55 °C (I), +65 °C(II), +80 °C (III)
Type and amount of screws must be calculated seperatly
Loads should be verified against the characteristic load
Minimum end support width: 40 mm
Minimum intermediate support width: 60 mm

13.01.2020

Table of loads- TENAX TR 100 PIR S11- 0,5/0,5

TENAX TR 100 PIR S11 - 0,5/0,5

Maximum allowable wind suction, kN/m²

Static scheme	Color group	Span lenght, m												
		1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7
Single span	I	9,66	6,51	4,12	2,54	1,74	1,28	0,99	0,80	0,66	0,56	0,49	0,43	-
	II	9,66	6,51	4,12	2,54	1,74	1,28	0,99	0,80	0,66	0,56	0,49	0,43	-
	III	9,66	6,51	4,12	2,54	1,74	1,28	0,99	0,80	0,66	0,56	0,49	0,38	-
Double span	I	7,36	3,87	2,52	1,83	1,42	1,16	0,98	-	-	-	-	-	-
	II	7,13	3,67	2,34	1,68	1,30	1,06	0,89	-	-	-	-	-	-
	III	6,77	3,36	2,09	1,47	1,12	0,91	0,77	-	-	-	-	-	-
Multi span	I	8,52	4,40	2,87	2,11	1,66	1,28	0,91	0,91	-	-	-	-	-
	II	8,26	4,20	2,72	1,99	1,57	1,28	0,91	0,91	-	-	-	-	-
	III	7,88	3,91	2,50	1,82	1,43	1,18	0,91	0,91	-	-	-	-	-

TENAX TR 100 PIR S11 - 0,5/0,5

Maximum allowable snow load, kN/m²

Static scheme	Color group	Span lenght, m												
		1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7
Single span	I, II, III	5,91	3,62	2,68	2,14	1,76	1,47	1,24	1,05	0,89	0,68	0,49	0,35	-
Double span	I, II, III	5,91	3,62	2,36	1,62	1,19	0,92	0,73	-	-	-	-	-	-
Multi span	I, II, III	5,91	3,62	2,68	1,92	1,43	1,11	0,89	-	-	-	-	-	-

Calculation in accordance with EN 14509
Roof pitch 3,0°
Load factors: EN 14509, Tab. E.8
Maximum deflection short term 1/200
Maximum deflection long term 1/100
Color groups: I(Very light), II(Light), III(Dark)
Table are made on normal internal climate (No freezers or cold rooms)
Internal temperature: summer +25 °C and winter +20 °C
External temperature: Summer +80 °C (I, II, III)
External temperature: Winter +55 °C (I), +65 °C(II), +80 °C (III)
Type and amount of screws must be calculated seperatly
Loads should be verified against the characteristic load
Minimum end support width: 40 mm
Minimum intermediate support width: 60 mm

13.01.2020

Table of loads- TENAX TR 120 PIR S11- 0,5/0,5

TENAX TR 120 PIR S11 - 0,5/0,5

Maximum allowable wind suction, kN/m²

Static scheme	Color group	Span lenght, m												
		1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7
Single span	I	10,90	7,65	4,77	2,96	2,04	1,50	1,16	0,93	0,77	0,66	0,57	0,50	0,44
	II	10,90	7,65	4,77	2,96	2,04	1,50	1,16	0,93	0,77	0,66	0,57	0,50	0,44
	III	10,90	7,65	4,77	2,96	2,04	1,50	1,16	0,93	0,77	0,66	0,57	0,50	0,44
Double span	I	7,39	3,96	2,60	1,90	1,48	1,21	1,02	-	-	-	-	-	-
	II	7,15	3,75	2,42	1,75	1,35	1,10	0,93	-	-	-	-	-	-
	III	6,80	3,43	2,15	1,52	1,16	0,91	0,77	-	-	-	-	-	-
Multi span	I	8,46	4,44	2,93	2,17	1,72	1,42	1,16	0,79	-	-	-	-	-
	II	8,21	4,24	2,77	2,04	1,61	1,33	1,14	0,79	-	-	-	-	-
	III	7,83	3,94	2,53	1,85	1,46	1,21	1,03	0,79	-	-	-	-	-

TENAX TR 120 PIR S11 - 0,5/0,5

Maximum allowable snow load, kN/m²

Static scheme	Color group	Span lenght, m												
		1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7
Single span	I, II, III	6,16	3,93	3,00	2,45	2,04	1,73	1,45	1,24	1,07	0,92	0,75	0,56	0,43
Double span	I, II, III	6,14	3,93	2,51	1,74	1,29	1,00	0,80	-	-	-	-	-	-
Multi span	I, II, III	6,14	3,93	2,93	2,03	1,52	1,19	0,96	0,80	-	-	-	-	-

Calculation in accordance with EN 14509
Roof pitch 3,0°
Load factors: EN 14509, Tab. E.8
Maximum deflection short term 1/200
Maximum deflection long term 1/100
Color groups: I(Very light), II(Light), III(Dark)
Table are made on normal internal climate (No freezers or cold rooms)
Internal temperature: summer +25 °C and winter +20 °C
External temperature: Summer +80 °C (I, II, III)
External temperature: Winter +55 °C (I), +65 °C(II), +80 °C (III)
Type and amount of screws must be calculated seperatly
Loads should be verified against the characteristic load
Minimum end support width: 40 mm
Minimum intermediate support width: 60 mm

13.01.2020

Table of loads- TENAX TR 150 PIR S11- 0,5/0,5

TENAX TR 150 PIR S11 - 0,5/0,5

Maximum allowable wind suction, kN/m²

Static scheme	Color group	Span lenght, m												
		1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7
Single span	I	12,27	8,99	5,79	3,61	2,49	1,83	1,42	1,14	0,93	0,79	0,68	0,60	0,53
	II	12,27	8,99	5,79	3,61	2,49	1,83	1,42	1,14	0,93	0,79	0,68	0,60	0,53
	III	12,27	8,99	5,79	3,61	2,49	1,83	1,42	1,14	0,93	0,79	0,68	0,60	0,53
Double span	I	7,42	4,06	2,70	1,98	1,55	1,27	1,08	0,94	-	-	-	-	-
	II	7,20	3,86	2,52	1,83	1,42	1,16	0,98	0,85	-	-	-	-	-
	III	6,86	3,55	2,25	1,59	1,21	0,93	0,77	0,67	-	-	-	-	-
Multi span	I	8,41	4,49	2,99	2,22	1,77	1,47	1,26	1,10	0,84	-	-	-	-
	II	8,18	4,29	2,83	2,09	1,66	1,38	1,18	1,03	0,84	-	-	-	-
	III	7,82	3,99	2,58	1,89	1,49	1,24	1,06	0,93	0,84	-	-	-	-

TENAX TR 150 PIR S11 - 0,5/0,5

Maximum allowable snow load, kN/m²

Static scheme	Color group	Span lenght, m												
		1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7
Single span	I, II, III	6,41	4,25	3,35	2,79	2,38	2,04	1,76	1,51	1,31	1,13	0,98	0,96	0,70
Double span	I, II, III	6,41	4,25	2,68	1,87	1,40	1,09	0,88	0,72	-	-	-	-	-
Multi span	I, II, III	6,41	4,25	3,07	2,15	1,62	1,27	1,05	0,86	0,73	-	-	-	-

Calculation in accordance with EN 14509
Roof pitch 3,0°
Load factors: EN 14509, Tab. E.8
Maximum deflection short term 1/200
Maximum deflection long term 1/100
Color groups: I(Very light), II(Light), III(Dark)
Table are made on normal internal climate (No freezers or cold rooms)
Internal temperature: summer +25 °C and winter +20 °C
External temperature: Summer +80 °C (I, II, III)
External temperature: Winter +55 °C (I), +65 °C(II), +80 °C (III)
Type and amount of screws must be calculated seperatly
Loads should be verified against the characteristic load
Minimum end support width: 40 mm
Minimum intermediate support width: 60 mm

13.01.2020

Table of loads- TENAX TR 200 PIR S11- 0,5/0,5

TENAX TR 200 PIR S11 - 0,5/0,5

Maximum allowable wind suction, kN/m²

Static scheme	Color group	Span lenght, m												
		1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7
Single span	I	14,19	10,90	7,48	4,68	3,23	2,38	1,84	1,47	1,21	1,02	0,88	0,76	0,68
	II	14,19	10,90	7,48	4,68	3,23	2,38	1,84	1,47	1,21	1,02	0,88	0,76	0,68
	III	14,19	10,90	7,48	4,68	3,23	2,38	1,84	1,47	1,21	1,02	0,88	0,76	0,68
Double span	I	7,54	4,24	2,86	2,12	1,67	1,38	1,17	1,02	0,90	0,81	-	-	-
	II	7,34	4,05	2,69	1,97	1,54	1,25	1,06	0,92	0,82	0,74	-	-	-
	III	7,04	3,77	2,43	1,74	1,33	1,03	0,83	0,71	0,63	0,58	-	-	-
Multi span	I	8,46	4,62	3,11	2,33	1,86	1,55	1,33	1,17	1,05	0,95	-	-	-
	II	8,25	4,43	2,94	2,19	1,74	1,45	1,24	1,09	0,98	0,89	-	-	-
	III	7,93	4,14	2,70	1,98	1,56	1,30	1,11	0,98	0,88	0,80	-	-	-

TENAX TR 200 PIR S11 - 0,5/0,5

Maximum allowable snow load, kN/m²

Static scheme	Color group	Span lenght, m												
		1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7
Single span	I, II, III	6,79	4,71	3,55	2,80	2,31	1,95	1,69	1,48	1,32	1,16	1,04	0,94	0,85
Double span	I, II, III	6,11	4,02	2,89	2,05	1,54	1,21	0,97	0,80	0,67	0,57	-	-	-
Multi span	I, II, III	6,11	4,02	2,97	2,30	1,74	1,37	1,12	0,93	0,79	0,69	0,68	-	-

Calculation in accordance with EN 14509
Roof pitch 3,0°
Load factors: EN 14509, Tab. E.8
Maximum deflection short term 1/200
Maximum deflection long term 1/100
Color groups: I(Very light), II(Light), III(Dark)
Table are made on normal internal climate (No freezers or cold rooms)
Internal temperature: summer +25 °C and winter +20 °C
External temperature: Summer +80 °C (I, II, III)
External temperature: Winter +55 °C (I), +65 °C(II), +80 °C (III)
Type and amount of screws must be calculated seperatly
Loads should be verified against the characteristic load
Minimum end support width: 40 mm
Minimum intermediate support width: 60 mm

06.07.2020