ALUBEN

ALUBEN
TECNICAL DATA

	STANDARD PANELS			TOLERANCES			OTHERS						
	LENGHT (MM)	WIDHT (MM)	TICKNESS (MM)	LENGHT (MM)	WIDHT (MM)	TICKNESS (MM)	FIRE CLASS (DM 26/6/84 E 3/9/01)	COEFFICIENT OF THERMAL EXPANSION (MM/M°K)	SERVICE TEMPERATURE (°C)	WEIGHT PER UNIT AREA (KG/M²)	THERMAL INSULATION U-VALUE (W/M²K)	SOUND INSULATION RW (DB)
ALUBEN 6	3050	1250	6	2	+1 / -2	±0,5	CLASSE 1	0,024	-30° +80°	5	15,2	21
ALUBEN 10	3050	1250	10	2	+1 / -2	±0,5	CLASSE 1	0,024	-30° +80°	5	9,1	21
ALUBEN 15	3050	1250	15	2	+1 / -2	±0,5	CLASSE 1	0,024	-30° +80°	5,5	6,1	21,4
ALUBEN 20	3050	1250	20	2	+1 / -2	±0,5	CLASSE 1	0,024	-30° +80°	5,5	4,6	21,4
ALUBEN 30	3050	1250	30	2	+1 / -2	±0,5	CLASSE 1	0,024	-30° +80°	6,6	3,0	22,1
ALUBEN 30 HEAVY	3050	1250	30	3	+1 / -3	±0,6	CLASSE 1	0,024	-30° +80°	10,1	2,8	24

ALUBEN
MECHANICAL PROPERTIES

	MODULUS OF ELASTICITY UNI-EN 310 (N/MM²)	BENDING STRENGHT UNI-EN 310 (N/MM²)	BENDING STIFFNHESS (NXM2/M)	COMPRESSIVE STRENGHT (N/MM2)
ALUBEN 6	31000	ND	558	>4
ALUBEN 10	11500	37,5	958	2,1
ALUBEN 15	11500	28,5	3234	2,15
ALUBEN 20	5600	32	3733	1,2
ALUBEN 30	2000	10,5	4500	0,95
ALUBEN 30 HEAVY	12500	24	28125	3,0

ALUBEN
MAXIMUM SUPPORT DISTANCES (MM)

	LOAD IN N/M²											
	600	800	1000	1200	1400	1600	1800	2000	2500	3000	3500	5000
ALUBEN 6	1250	1250	1250	1250	1250	1250	1200	1100	1000	--	--	--
ALUBEN 10	1250	1250	1250	1250	1250	1250	1250	1250	1200	1100	--	--
ALUBEN 15	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250	--
ALUBEN 20	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250
ALUBEN 30	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250

FOUR SIDED SIMPLY SUPPORTED SQUARE PLATE
SAFETY FACTOR >3
DEFLECTION/EDGE<1/50

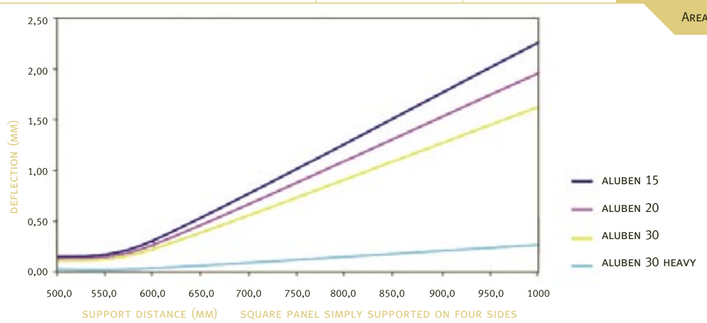
TRANSLATION

TECHNICAL DATA: DATI TECNICI: TECHNISCHE DATEN. LENGHT (MM): LUNGHEZZA (MM): LÄNGE (MM). WIDHT (MM): LARGHEZZA (MM): BREITE (MM). TICKNESS (MM): SPESSORE (MM): STÄRKE (MM). FIRE CLASS (DM 26/6/84 E 3/9/01): CLASSE FUOCO (DM 26/6/84 E 3/9/01): FEUERKLASSIFIZIERUNG (DM 26/6/84 E 3/9/01). COEFFICIENT OF THERMAL EXPANSION (MM/M°K): COEFFICIENTE DI ESPANSIONE TERMICA (MM/M°K): KOEFFIZIENT DER WÄRMEAUSDEHNUNG (MM/M°K). SERVICE TEMPERATURE (°C): TEMPERATURA DI SERVIZIO (°C): ANWENDUNGS-TEMPERATUR (°C). WEIGHT PER UNIT AREA (KG/M2): PESO PER UNITÀ DI AREA (KGM2): GEWICHT PRO EINHEIT (KG/M2). THERMAL INSULATION U-VALUE (W/M2X°K): ISOLAMENTO TERMICO U-VALUE (W/M2X°K): WÄRMEISOLIERUNG K-WERT (W/M2X°K). SOUND INSULATION RW (DB): ISOLAMENTO ACUSTICO (DB): LÄRM-DÄMMUNG RW (DB). STANDARD PANELS: PANNELLI STANDARD: STANDARD-PANEEL. TOLERANCES: TOLLERANZE: TOLERANZEN. OTHERS: ALTRO: WEITERES.MECHANICAL PROPERTIES: PROPRIETÀ MECCANICHE: MECHANISCHE EIGENSCHAFTEN. MODULUS OF ELASTICITY UNI-EN 310 (N/MM2): MODULO DI ELASTICITÀ RILEVATO SECONDO LA NORMA UNI-EN 310 (N/MM2): ELASTIZITÄTSMODUL UNI-EN 310 (N/MM2). BENDING STRENGHT UNI-EN 310 (N/MM2): RESISTENZA A FLESSIONE RILEVATO SECONDO LA NORMA UNI-EN 310 (N/MM2): BIEGESTEIFIGKEIT UNI-EN 310 (N/MM2), BENDING STIFFNHESS (NXM2/M): RIGIDEZZA A FLESSIONE (NXM2/M): BIEGESTEIFIGKEIT (NXM2/M). COMPRESSIVE STRENGHT (N/MM2): RESISTENZA A COMPRESSIONE (N/MM2): DRUCKFESTIGKEIT (N/MM2). MAXIMUM SUPPORT DISTANCES (MM): DISTANZE DI SUPPORTO MAX (MM): MAXIMALER UNTERSTÜTZUNGS-ABSTAND (MM). LOAD IN N/M2: CARICO IN N/M2: BELASTUNG IN N/M2. FOUR SIDED SUPPORTED SQUARE PLATE: APPOGGIO SEMPLICE SU 4 LATI: EINFACHER, RECHTWINKLIGER SUPPORT AUF VIER SEITEN. SAFETY FACTOR >3: FATTORE DI SICUREZZA >3: SICHERHEITSFAKTOR >3. DEFLECTION/EDGE <1/50: FRECCIA/LATO <1/50: DURCHBIEGUNG/ECKE <1/50. LOAD CAPACITY TABLE: TABELLA CAPACITÀ DI CARICO: BELASTUNGSTABELLE. DATA IN MM: DATI IN MM: WERTE IN MM. SUPPORT GAP: UNTERSTÜTZUNGS-ABSTAND. DEFLECTION (MM): FRECCIA (MM): DURCHBIEGUNG (MM). SUPPORT DISTANCE (MM): DISTANZA TRA I SUPPORTI: SUPPORTABSTAND (MM). SQUARE PANEL SIMPLY SUPPORTED ON FOUR SIDES: PANNELLO QUADRATO APPOGGIO SEMPLICE SU 4 LATI: EINFACHER, RECHTWINKLIGER SUPPORT AUF VIER SEIEN.

ALUBEN
LOAD CAPACITY TABLE 2000 N /M^2

DATA IN MM	SUPPORT GAP 500MM	SUPPORT GAP 600MM	SUPPORT GAP 1000MM
ALUBEN 15	0,14	0,29	2,24
ALUBEN 20	0,12	0,25	1,94
ALUBEN 30	0,10	0,21	1,61
ALUBEN 30 HEAVY	0,02	0,03	0,26

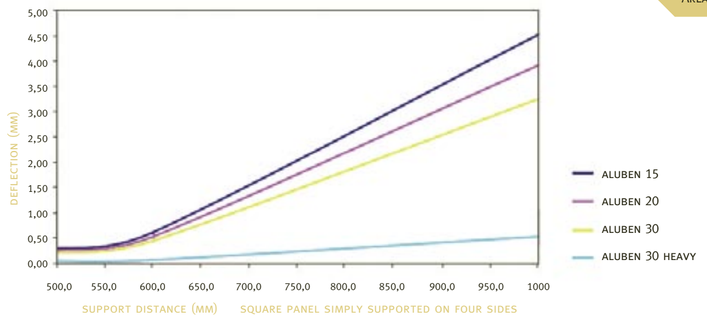
AREA LOAD 2000 N /MQ



ALUBEN
LOAD CAPACITY TABLE 4000 N /M^2

DATA IN MM	SUPPORT GAP 500MM	SUPPORT GAP 600MM	SUPPORT GAP 1000MM
ALUBEN 15	0,28	0,58	4,49
ALUBEN 20	0,24	0,50	3,89
ALUBEN 30	0,20	0,42	3,23
ALUBEN 30 HEAVY	0,03	0,07	0,52

AREA LOAD 4000 N /MQ



PRODUCTS TECHNICAL CARDS
SCHEDE TECNICHE PRODOTTI
TECHNISCHE KARTEN PRODUKT

bencore®
STRUCTURAL PLASTIC PANELS

THE BENCORE PRODUCT LINE IS MADE OF COMPOSITE PANELS WITH AN INTERNAL CORE OF HONEYCOMB STRUCTURE, CALLED BIRDWING®, IT CAN BE SUPPLIED TRANSPARENT OR NON TRANSPARENT, LAMINATED ON BOTH SIDES WITH RESIN SHEETS (CLEAR OR COLOURED), ALUMINIUM, MEDIUM DENSITY FIBREBOARD (MDF), LAMINATES OR OTHER MATERIALS.

I PRODOTTI BENCORE SONO PANNELLI COMPOSITI CON ANIMA INTERNA IN STRUTTURA ALVEOLARE (A NIDO D'APE), DETTA BIRDWING®, TRASPARENTE O NON, RIVESTITI SU ENTRAMBI I LATI CON MATERIE PLASTICHE (TRASPARENTI O COLORATE), ALLUMINIO, MDF O ALTRI MATERIALI.

DIE PRODUKTLINIE VON BENCORE BESTEHT AUS VERBUNDPLATTEN MIT EINEM INNEREN WABENKERN, DER BIRDWING® GENANNT WIRD UND DER TRANSPARENT ODER NICHT TRANSPARENT SEIN KANN. DIESER WIRD BEIDSEITIG BESCHICHTET, WOBEI DIESE BESCHICHTUNG AUS PLASTIK-PLATTEN (KLAR ODER FARBIG), ALUMINIUM, MITTELHARTEN FASERPLATTEN (MDF), LAMINIERTEN ODER ANDEREN MATERIALIEN BESTEHEN KANN.

STARLIGHT

STARLIGHT
TECNICAL DATA

	STANDARD PANELS			TOLERANCES			OTHERS					
	LENGHT (MM)	WIDHT (MM)	TICKNESS (MM)	LENGHT (MM)	WIDHT (MM)	TICKNESS (MM)	FIRE CLASS (DM 26/6/84 E 3/9/01)	COEFFICIENT OF THERMAL EXPANSION (MM/M°K)	SERVICE TEMPERATURE (°C)	WEIGHT PER UNIT AREA (KG/M²)	THERMAL INSULATION U-VALUE (W/M²K)	SOUND INSULATION RW (DB)
STARLIGHT / STARLIGHT EXTRA 19 CLEAR T	3015	1000	19	±2	+1 / -2	±0,5MM	---	0,065	-30° +80°	8,6 / 9,4	3	22
STARLIGHT / STARLIGHT EXTRA 21 CLEAR T	3015	1000	21	±2	+1 / -2	±0,5MM	---	0,065	-30° +80°	11,9 / 12,4	2,9	22
STARLIGHT / STARLIGHT EXTRA 21 COLOUR / SATIN	3015	1000	21	±2	+1 / -2	±10%	---	0,065	-30° +80°	11,9 / 12,4	2,9	22
STARLIGHT / STARLIGHT EXTRA 34 CLEAR T	3015	1000	34	±2	+1 / -2	±0,5MM	---	0,065	-30° +80°	8,6 / 9,4	2	23
STARLIGHT / STARLIGHT EXTRA 36 CLEAR T	3015	1000	36	±2	+1 / -2	±0,5MM	---	0,065	-30° +80°	11,9 / 12,4	1,9	24
STARLIGHT / STARLIGHT EXTRA 36 COLOUR/SATIN	3015	1000	36	±2	+1 / -2	±10%	---	0,065	-30° +80°	11,9 / 12,4	1,9	24
STARLIGHT PLUS CLASS __ 19	3015	1000	19	±2	+1 / -2	±0,5MM		0,065	-30° +80°	9,9	3	22
STARLIGHT PLUS CLASS __ 34	3015	1000	34	±2	+1 / -2	±0,5MM	CLASSE 1	0,065	-30° +80°	9,9	2	22
STARLIGHT PLUS FLOOR S 38	3015	1000	38	±2	+1 / -2	±0,5MM	---	0,065	-30° +80°	14,9	1,8	25
STARLIGHT PLUS UVP T S 21	3015	1000	21	±2	+1 / -2	±0,5MM	---	0,065	-30° +80°	9,4	2,9	22
STARLIGHT PLUS UVP T S 36	3015	1000	36	±2	+1 / -2	±0,5MM	---	0,065	-30° +80°	12,4	1,9	24

STARLIGHT
MECHANICAL PROPERTIES

	MODULUS OF ELASTICITY UNI-EN 310 (N/MM²)	BENDING STRENGHT UNI-EN 310 (N/MM²)	BENDING STIFFNESS (NXM2/M)	COMPRESSIVE STRENGHT (N/MM2)
STARLIGHT / STARLIGHT EXTRA 19	1250	33	714,5	2,6
STARLIGHT / STARLIGHT EXTRA 21	1790	33,1	1381,4	2,6
STARLIGHT / STARLIGHT EXTRA 34	914	19,4	2993,7	2,1
STARLIGHT / STARLIGHT EXTRA 36	1100	18,7	4276,8	2,1
STARLIGHT PLUS CLASS __ 19	1150	36	657,3	2,6
STARLIGHT PLUS CLASS __ 34	720	21	2358,2	2,1
STARLIGHT PLUS FLOOR S 38	1200	20	5487,2	2,1
STARLIGHT PLUS UVP T S 21	1450	34	1119,0	2,6
STARLIGHT PLUS UVP T S 36	960	26	3732,5	2,1

	SUN ELEVATION ANGLE			
	0°	30°	45°	60°
STARLIGHT PLUS UVP T S 21	0,61	0,59	0,55	0,42

TSET-VALUE (TOTAL ENERGY SOLAR TRANSMITTANCE)

STARLIGHT
MAXIMUM SUPPORT DISTANCES (MM)

LOAD IN N/M²

	600	800	1000	1200	1400	1600	1800	2000	2500	3000	3500	5000
STARLIGHT / STARLIGHT EXTRA 19	1900	1750	1600	1500	1400	1350	1300	1250	1100	1000	950	
STARLIGHT / STARLIGHT EXTRA 21	2000	2000	1950	1850	1750	1650	1600	1550	1450	1350	1250	
STARLIGHT / STARLIGHT EXTRA 34	2000	2000	2000	2000	2000	2000	2000	2000	1850	1750	1650	1500
STARLIGHT / STARLIGHT EXTRA 36	2000	2000	2000	2000	2000	2000	2000	2000	2000	1900	1850	1650
STARLIGHT PLUS CLASS __ 19	1800	1650	1550	1450	1350	1300	1250	1200	1050	950	900	
STARLIGHT PLUS CLASS __ 34	2000	2000	2000	2000	2000	2000	1900	1850	1700	1600	1500	1350
STARLIGHT PLUS UVP T 21	2000	1950	1830	1700	1620	1550	1480	1420	1350	1250	1200	
STARLIGHT PLUS UVP T 36	2000	2000	2000	2000	2000	2000	2000	2000	2000	1850	1800	1600

FOUR SIDED SIMPLY SUPPORTED SQUARE PLATE
SAFETY FACTOR>3
DEFLECTION/EDGE<1/50

STARLIGHT PLUS FLOOR S38
LOAD CAPACITY TABLE

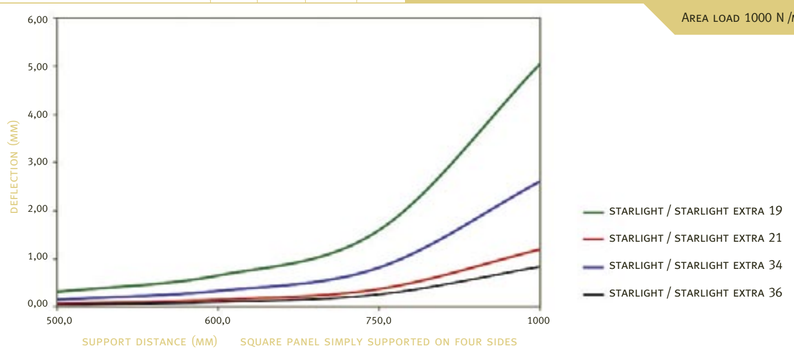
DATA IN MM	SUPPORT GAP 500MM	SUPPORT GAP 600MM	SUPPORT GAP 1000MM
DEFLECTION AT A LOAD OF 2000N/M² AND FOUR-SIDED-SUPPORT	0,10	0,17	1,32
DEFLECTION AT A LOAD OF 2000N/M² AND TWO-SIDED-SUPPORT	0,30	0,61	4,70
DEFLECTION AT A CENTRAL LOAD OF 2000N AND FOUR-SIDED-SUPPORT (*)	0,90	1,30	3,77
DEFLECTION AT A LOAD OF 3000N/M² AND FOUR-SIDED-SUPPORT	0,12	0,26	1,98
DEFLECTION AT A LOAD OF 3000N/M² AND TWO-SIDED-SUPPORT	0,44	0,92	7,11
DEFLECTION AT A CENTRAL LOAD OF 3000N AND FOUR-SIDED-SUPPORT (*)	1,40	2,00	5,66
DEFLECTION AT A LOAD OF 4000N/M² AND FOUR-SIDED-SUPPORT	0,17	0,34	2,65
DEFLECTION AT A LOAD OF 4000N/M² AND TWO-SIDED-SUPPORT	0,59	1,23	9,48
DEFLECTION AT A CENTRAL LOAD OF 4000N AND FOUR-SIDED-SUPPORT (*)	1,90	2,70	7,55
DEFLECTION AT A LOAD OF 5000N/M² AND FOUR-SIDED-SUPPORT	0,21	0,43	3,31
DEFLECTION AT A LOAD OF 5000N/M² AND TWO-SIDED-SUPPORT	0,74	1,54	11,80
DEFLECTION AT A CENTRAL LOAD OF 5000N AND FOUR-SIDED-SUPPORT (*)	2,36	3,40	9,50

CALCULATED DATA WITH SAFETY FACTOR >3
(*) THE MINIMUM APPLICATION LOAD SURFACE MAST BE >25 CM²

STARLIGHT
LOAD CAPACITY TABLE 1000 N /M^2

	500,0	600,0	750,0	1000
STARLIGHT / STARLIGHT EXTRA 19	0,32	0,66	1,61	5,08
STARLIGHT / STARLIGHT EXTRA 21	0,16	0,34	0,83	2,63
STARLIGHT / STARLIGHT EXTRA 34	0,08	0,16	0,38	1,21
STARLIGHT / STARLIGHT EXTRA 36	0,05	0,11	0,27	0,85

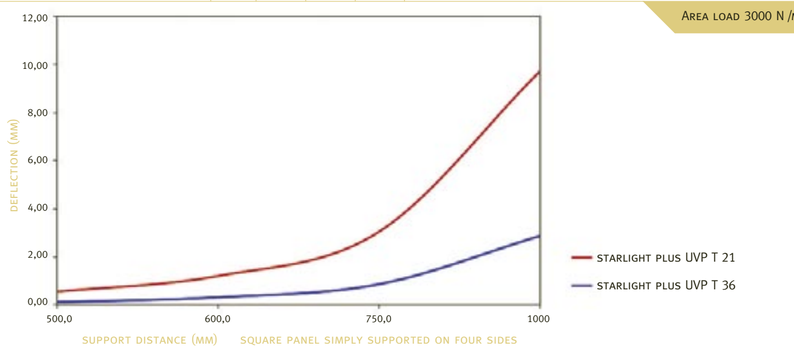
AREA LOAD 1000 N /MQ



STARLIGHT
LOAD CAPACITY TABLE 1000 N /M^2

	500,0	600,0	750,0	1000
STARLIGHT PLUS UVP T 21	0,61	1,26	3,08	9,73
STARLIGHT PLUS UVP T 36	0,18	0,38	0,92	2,92

AREA LOAD 3000 N /MQ



LIGHTBEN

LIGHTBEN
TECNICAL DATA

	STANDARD PANELS			TOLERANCES			OTHERS							
	LENGHT (MM)	WIDHT (MM)	TICKNESS (MM)	LENGHT (MM)	WIDHT (MM)	TICKNESS (MM)	FIRE CLASS (DM 26/6/84 E 39/01)	COEFFICIENT OF THERMAL EXPANSION (MM/MºK)	SERVICE TEMPERATURE (ºC)	WEIGHT PER UNIT AREA (KG/M²)	THERMAL INSULATION U-VALUE (W/MºK)	SOUND INSULATION Rw (DB)
LIGHTBEN PLUS 19	3015	1000	19	2	+1 / -2	10%	CLASSE 1	0,065	-30º +80º	6	3	22
LIGHTBEN PLUS 21	3015	1000	21	2	+1 / -2		CLASSE 1	0,065	-30º +80º	8,2	2,9	22

LIGHTBEN
MECHANICAL PROPERTIES

	MODULUS OF ELASTICITY UNI-EN 310 (N/MM²)	BENDING STRENGHT UNI-EN 310 (N/MM²)	BENDING STIFFNESS (NXM2/M)	COMPRESSIVE STRENGHT (N/MM2)
LIGHTBEN PLUS 19	700	22	400,1	1,0
LIGHTBEN PLUS 21	850	25	656,0	1,0

LIGHTBEN
LOAD CAPACITY TABLE 1000 N /M^2

SUPPORT DISTANCE	500,0	600,0	750,0	1000
LIGHTBEN PLUS 19	0,40	0,90	2,00	6,20
LIGHTBEN PLUS 21	0,32	0,70	1,60	5,00

AREA LOAD 1000 N /MQ