

ROOF-CMV

CENTRIFUGALNI KROVNI VENTILATOR SA VERTIKALNIM PROTOKOM

VERTICAL DISCHARGE
CENTRIFUGAL ROOF FAN



APLIKACIJE

Ova serija je dizajnirana za krovne instalacije, za kanalske ali i direktne aspiracije, u civilnim, poslovnim i industrijskim zgradama, kao što su: kancelarije, restorani, hoteli, tržni centri, skladišta, industrijska postrojenja, mašinske prostorije itd

DOMET

Serija se sastoji od 8 veličina sa prečnikom radnog kola od 400 do 710 mm, sa 4, 6, 8 polnim motorima.

KARAKTERISTIKE

ROOF-CMV serija je vertikalna verzija klasičnog ROOF-CM. Aspirirane tečnosti koje se izbacuju nagore smanjuju probleme vezane za buku i neugodne mirise u kućama koje se nalaze u horizontalnom položaju u odnosu na ventilator. Izbor materijala, uključujući ABS "rezervoar" i poklopac od pocinkovanog lima, čini ROOF-CMV čvrstim, pouzdanim proizvodom otpornim na vremenske uslove, kvaliteta koji nisu uobičajeni u panorami ventilatora sa vertikalnim protokom.

KONSTRUKCIJA

- Visoko efikasan rotor sa pozadinskim sečivom od pocinkovanog lima.
- Balansiranje prema UNI ISO 21940-11.
- Sidrena osnova, sa usisnim usnikom, od čeličnog lima zaštićenog od atmosferskih uticaja.
- Spoljna zaštitna mreža izrađena u skladu sa UNI EN ISO 12499 od čelične žice zaštićene od atmosferskih uticaja.
- Tehnopolimerni transporter. Šešir od čeličnog lima zaštićen od atmosferskih uticaja.
- Elektromotor na naizmjeničnu struju, asinhroni trofazni ili monofazni, odvojen od protoka transportovanog vazduha, IP 55 zaštita, klasa F izolacije, S1 servis, konstrukcija u skladu sa IEC / EEC / UNEL MEC specifikacijama.
- Izvršenje 5; direktna spojnica sa konzolnim radnim kolom.

TEHNIČKE SPECIFIKACIJE

ROOF-CM standard

- Preneti vazduh: čist ili malo prašnjav
- Temperatura tečnosti koja se prenosi na: $-20^{\circ}\text{C} / +50^{\circ}\text{C}$.
- Napon napajanja:
 - Trofazna verzija (T) 400V-3Ph.
 - Monofazna verzija (M) 230V-1Ph.
- Frekvencija: 50Hz.
- Operacija u ekstrakciji

PRIBOR

- Ulazni gravitacioni zatvarač (GS-CM).
- Counter-base to wall (CB).
- Valovite podloge za krovne jedinice (SB).
- Usisna mreža (FPG)
(Neophodno za upotrebu sa slobodnim ustima.)
- Servisni prekidač (SV).
- Eksterni terminalni blok (OTB).
- Usisni prigušivači (SIL-RO).

NA ZAHTEV

- Verzije za isparenja od požara (ROOF-CMV-HT).
- Verzije sa metalnim transporterom.
- Verzije bez šešira.

APPLICATIONS

ROOF-CM line has been designed for roofing installations, for direct or ducted exhaust in civilian, commercial and industrial buildings, as: offices, restaurants, hotels, shopping centers, warehouses, industrial plants, engine rooms etc.

RANGE

This line consists of 8 sizes with impeller diameter from 400 up to 710 mm, and 4, 6, 8 pole motors.

ADVANTAGES

ROOF-CMV range is the vertical discharge version of the classic ROOF-CM. The fluids exhausted upward reduce the problems of disturbing noise and smells propagating to the neighboring houses located in horizontal position in the respect of the fan. The choice of materials including the outer conveyor and the cap in ABS make of the ROOF-CMV a robust, reliable and weather proof product. These attributes are not common in the panorama of the vertical discharge roof fans.

CONSTRUCTION

- Backward curved blade impeller, high efficiency in galvanized steel sheet.
- Balancing according to UNI ISO 21940-11.
- Fixing base, with inlet cone, in steel sheet protected against the atmospheric agents.
- Protection guard in steel rod, manufactured according to UNI EN ISO 12499 protected against the atmospheric agents.
- Outer conveyor in techno-polymer.
- Asynchronous electric motor mono phase or three phase, outside the airflow, IP 55, insulation cl. F, service S1, according to IEC/EEC / UNEL MEC.
- Arrangement 5; directly flanged on the motor shaft.

TECHNICAL SPECIFICATIONS

ROOF-CM STANDARD

- Conveyed air: clean, not abrasive.
- Temperature of conveyed air: $-20^{\circ}\text{C} / +50^{\circ}\text{C}$.
- Voltage:
 - Three-phase version (T) 400V-3Ph.
 - Single-phase version (M) 230V-1Ph.
- Frequency: 50Hz.
- Only exhausting.

ACCESSORIES

- Inlet gravity shutter (GS-CM).
- Counter base to be walled up (CB).
- Corrugate bases (SB).
- Inlet grid (FPG) (Necessary for use in free air).
- Service switch (SW).
- Outer terminal box (OTB).
- Inlet silencers (SIL-RO).

UPON REQUEST

- Smoke exhaust version (ROOF-CMV-HT).
- Versions with outer conveyor in metal sheet.
- Versions without cap.

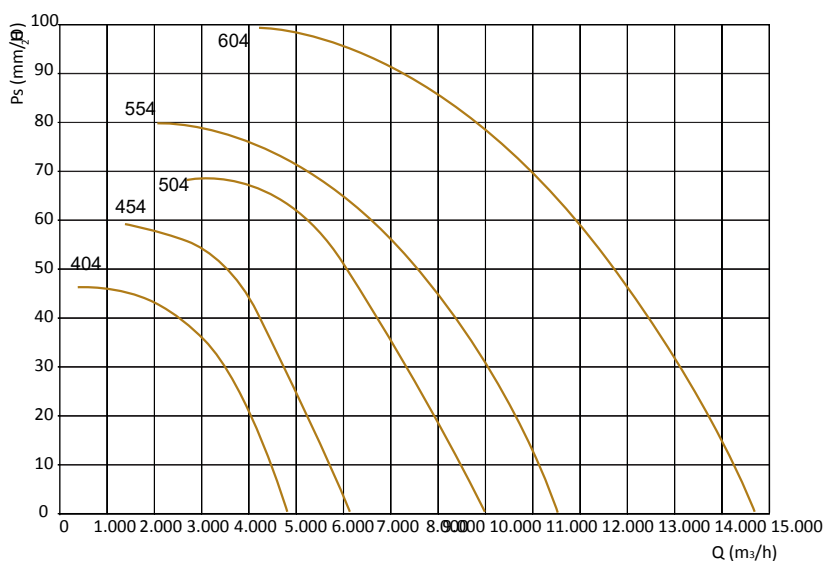
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PERFORMANSE - PERFORMANCES

1 Mm H₂O = 9,8 Pa

Performanse prikazane na dijagramima odnose se na vazduh na temperaturi od 15 °C i nadmorskoj visini od 0 m. , a dobijeni su u instalacijama tipa "C" u nedostatku mreže i pribora.

Performances shown in the selection diagrams refer to air at 15°C temperature and 0 mt a.s.l. altitude, and they were obtained in installation type "C" with no grid nor accessories.

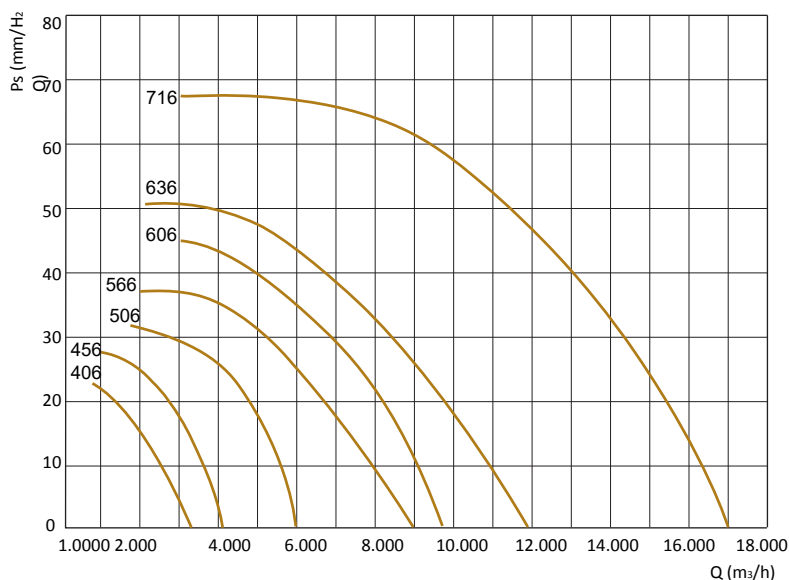


4 POLA / POLES (1500 RPM) MONOFAZNO / MONO-PHASE

Model Model	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A))
404 M	0,37	3,1	71	56
454 M	0,75	5,6	80	60

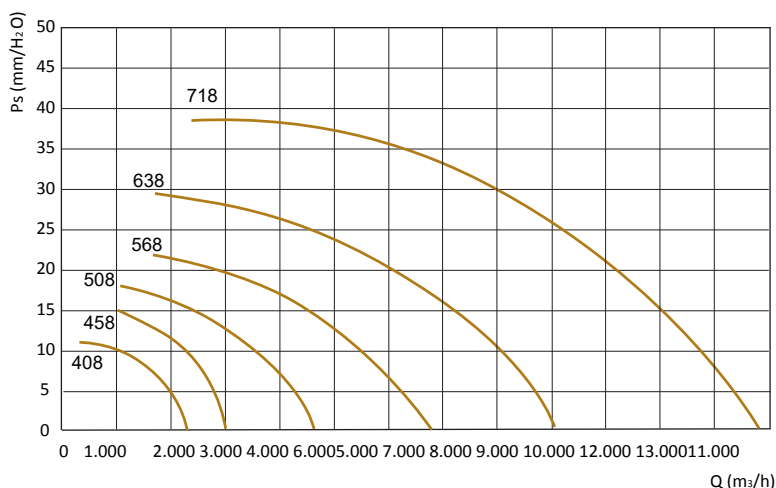
4 POLA / POLES (1500 RPM) TROFAZNO / THREE-PHASE

Model Model	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A))
404 T	0,37	1,2	71	56
454 T	0,75	2,0	80	60
504 T	1,1	2,8	90	62
554 T	1,5	3,5	90	68
604 T	3	6,5	100	74



6 POLA / POLES (1000 RPM) TROFAZNO / THREE-PHASE

Model Model	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A))
406 T	0,18	0,7	71	48
456 T	0,37	1,3	80	51
506 T	0,37	1,3	80	53
566 T	0,75	2,6	90	59
606 T	0,75	2,6	90	63
636 T	1,1	3,8	90	63
716 T	2,2	5,7	112	68



8 POLA / POLES (750 RPM) TROFAZNO / THREE-PHASE

Model Model	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A))
408 T*	0,25	1,1	71	42
458 T	0,25	1,1	80	43
508 T	0,25	1,1	80	47
568 T	0,37	1,4	90	50
638 T	0,55	2	90	53
718 T	0,75	2,3	100	60

Pm = Snaga motora
In = Potrošnja struje
Lp = Nivo zvučnog pritiska u slobodnom polju 6 m od ventilatora sa kanalnim ulazom i slobodnim izlazom.

Pm = Motor power.
In = Absorbed current.
Lp = Sound pressure level in free field at 6 m distance from the fan, with inlet ducted and free outlet

Tolerancije: aerodinamičke performanse i buka su unutar tolerancija navedenih u DIN 24166, klasa 2

* Samo za tržište van Evrope

TOLERANCES: performances and sound power levels within the tolerances allowed by the DIN 24166 standard for Class 2.

* Only for-non European market

NIVO BUKE - NOISE LEVEL

4 POLA / POLES

Model Model	63	125	250	500	1k	2k	4k	8k	Total
	Hz								
404	27	39	46	50	50	50	48	35	56
454	31	43	50	54	54	54	52	39	60
504	33	45	52	56	56	56	54	41	62
554	46	55	57	62	61	61	59	54	68
604	45	57	64	68	68	68	66	53	74

6 POLA / POLES

Model Model	63	125	250	500	1k	2k	4k	8k	Total
	Hz								
406	26	36	41	44	43	40	35	27	48
456	29	39	44	47	46	43	38	30	51
506	31	41	46	49	48	45	40	32	53
566	37	47	52	55	54	51	46	38	59
606	41	51	56	59	58	55	50	42	63
636	41	51	56	59	58	55	50	42	63
716	46	56	61	64	63	60	55	47	68

8 POLA / POLES

Model Model	63	125	250	500	1k	2k	4k	8k	Total
	Hz								
408	20	30	35	38	37	34	29	21	42
458	21	31	36	39	38	35	30	22	43
508	25	35	40	43	42	39	34	26	47
568	28	38	43	46	45	42	37	29	50
638	31	41	46	49	48	45	40	32	53
718	38	48	53	56	55	52	47	39	60

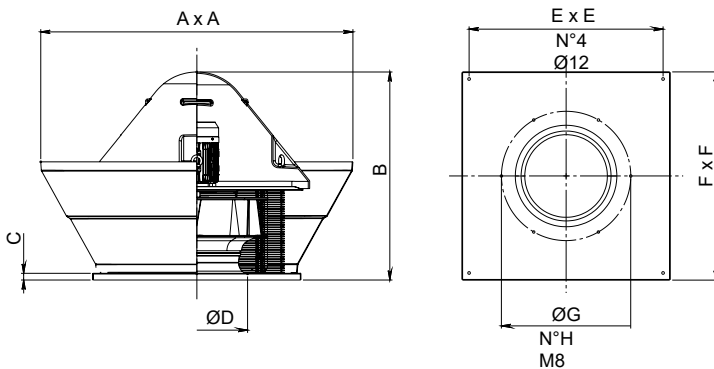
Upozorenje: nivo zvučnog pritiska se odnosi na omnidirekciono merenje u slobodnom polju 6 m od ventilatora sa kanalnim dovodom i besplatnom isporukom.

" Sve ventilacione jedinice, prema Evropskoj regulativi 1253/14, moraju da rade pomoću varijatora brzine prema vrsti elektromotora. Indikacija pogona je prikazana u dokumentaciji same ventilacione jedinice "

ATTENTION: sound pressure level is measured in free field at 6 m from the fan, in any direction, with ducted inlet and free outlet. "All the ventilation units, according to EU Rule 1253/14, must be equipped with variable speed drive depending by motor type. For the suitable driver please refer to the technical documentation of the unit itself".

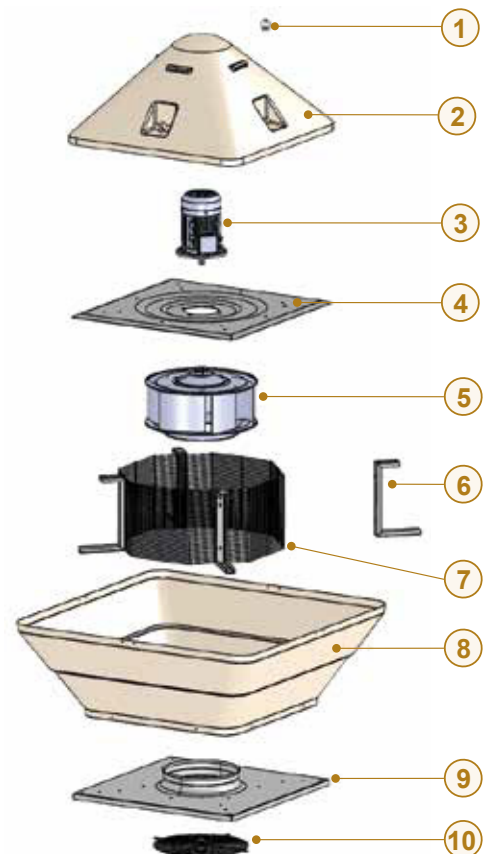
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DIMENZIJE - DIMENSIONS



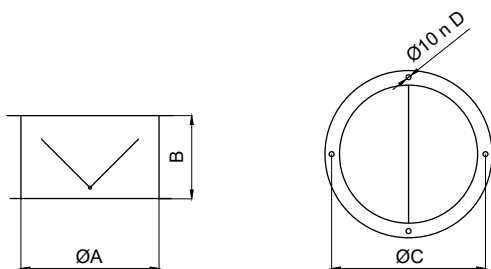
Model Model	A	B	C	ØD	E	F	ØG	n°H	kg
40	980	720	35	350	600	650	382	4	45
45	980	750	35	400	600	650	432	4	51
50	1200	860	40	450	710	760	485	5	73
55	1200	820	40	460	710	760	535	5	90
56	1200	900	40	500	710	760	535	5	80
60	1400	950	40	500	870	930	580	6	120
63	1400	1000	40	550	870	930	580	6	120
71	1400	1060	40	600	870	930	634	7	135

Dimenzionalne tolerancije u ± 5 mm - Dimensional tolerances ± 5 mm

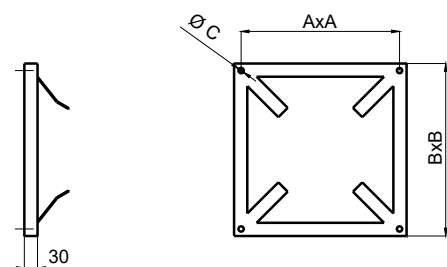


- 1 Nosači za podizanje - Lifting eyebolts
- 2 Prekrivač - Cover
- 3 Motor - Motor
- 4 Nosač motora - Motor support
- 5 Impler - Impeller

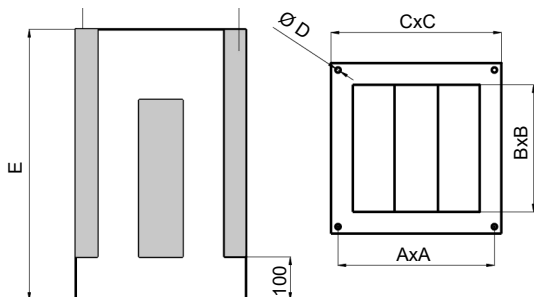
- 6 Nosači držača mreže - Grid brackets
- 7 Zaštitna mreža - Protection grid
- 8 Vertikalni transporter - Vertical conveyor
- 9 Sidrena baza - Fixing base
- 10 Zaštitna rešetka (pribor) obavezna za slobodan vazduh - Protection grid (accessory) / Mandatory for free air

ROOF-CM/CMV**VELIČINA PRIBORA - ACCESSORIES DIMENSIONS****GS-CM: ZATVARAČ - SHUTTER**

Model Model	ØA	B	ØC	n*D	kg
GS-CM 31	280	170	310	3	2,2
GS-CM 35	300	180	330	3	3,3
GS-CM 40	350	200	382	4	4
GS-CM 45	400	230	432	4	5
GS-CM 50	450	260	485	5	5,5
GS-CM 55-56	500	290	535	5	6
GS-CM 60-63	550	310	580	6	8,5
GS-CM 71	600	330	634	7	9
GS-CM 80	710	400	770	8	13

CB-CM: OSNOVA KABINETA - COUNTER BASE

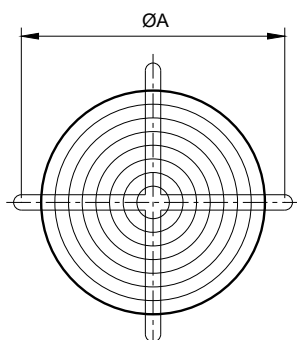
Model Model	A	B	C	kg
CB-CM 31	360	390	M8	1
CB-CM 35	450	490	M8	1
CB-CM 40-45	600	640	M8	2,8
CB-CM 50-55-56	710	750	M10	3,3
CB-CM 60-63-71- 80	870	920	M10	4,2

SIL-RO: PRIGUŠIVAČ - SILENCER

Model Model	A	B	C	D	E	kg
SIL-RO 31	360	310	390	M8	850	28
SIL-RO 35	450	390	490	M8	850	37
SIL-RO 40-45	600	540	640	M8	850	43
SIL-RO 50-55-56	710	650	750	M10	850	51
SIL-RO 60-63-71- 80	870	820	920	M10	1100	80

Model Model	Hz							
	63	125	250	500	1k	2k	4k	8k
SIL-RO 31	2	4	6	10	16	18	15	11
SIL-RO 35	3	5	9	11	19	20	18	14
SIL-RO 40-45	3	4	8	9	18	15	10	6
SIL-RO 50-55-56	4	5	11	15	16	12	9	5
SIL-RO 60-63-71-80	3	4	5	8	14	9	7	3

Slabjenje u dB po oktavnom opsegu (Hz)
Octave (Hz) spectrum of noise attenuation in dB.

FGP: USISNA MREŽA - INLET GRID

Model Model	A	kg
FGP 31	355	0,6
FGP 35	395	0,6
FGP 40	395	0,7
FGP 45	395	0,7
FGP 50	450	0,9
FGP 55-56	560	1
FGP 60	620	1,3
FGP 63	620	1,3
FGP 71	690	1,5
FGP 80	860	1,8

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PRIBOR - ACCESSORIES

SB: TALASASTE POTPORNE OSNOVE ZA KROVNE KULE - SUPPORT BASES FOR ROOF FANS



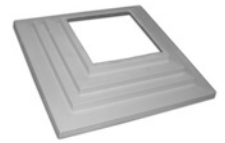
SB1g/1 - SBI/1-2



SBc



SB1p



SBBr

APLIKACIJE

SB (converse) rebraste potporne baze napravljene od čvrstog fiberglasa, pogodne su za ugradnju naših krovnih stubova na krovove od valovite ploče, izbjegavajući štetnu stagnaciju vode oko ventilatora i skupe zidarske ili stolarske radove.

VERZIJE

SB1g/1, SBI/1-2, SBI, SBc, SB1p: za upotrebu sa krovnim ventilatorima sa bazom 930x930 mm (modeli 60 i 71).

SBr: redukcija koja se spaja sa **SBI, SBc, SB1p** bazama za instalacije krovnih ventilatora 45-50-56.

Verzije SB su pogodne za spajanje sa valovitim pločama sa nagibom kosine:

- **SB1g/1:** trapezoidni talas H 28 (razmak 112 mm, korak 28 mm)
- **SBI/1 10x146:** internacionalni (korak 146 mm visina 48 mm)
- **SBI/2 10x177:** "Euro" (korak 177 mm visina 51 mm mod.)
- **SBc:** „Euro“ (korak 177 mm visina 51 mm i radijus savijanja lima jednak 3 metra)
- **SB1p:** karakteristike poput SBI, ali sa netalasastim preklompima (ivicama)

INSTALACIJA

Preklomite prirubnicu na nizvodnu ploču i postavite je uzvodno. Preklapanje za najmanje jedan i četvrtinu talasa sa susjednim bočnim pločama (mod. **SB1g/1, SBI/g1-2, SBc**). Proverite da niste previše preopteretili razgovor.

APPLICATIONS

The support bases SB (valleys), manufactured in sturdy glass-resin, are suitable for the installation of our roof fans on overlays built in corrugated slabs, avoiding detrimental stagnations of water nearby the fan and costly masonry or carpentry works.

VERSIONS

SB1g/1, SBI/1-2, SBI, SBc, SB1p: to be used with roof fans having bases 930x930 mm (Models 63 and 71).

SBr: Adaptor to be coupled with soaker bases **SBI, SBc, SB1p** for installation of roof fans models 45-50-56.

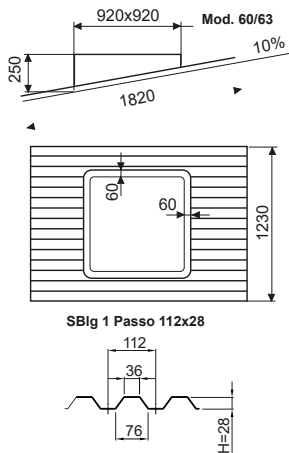
The versions SB are suitable to be coupled to corrugated slabs with pitch slope type:

- **SB1g/1:** trapezoidal wave H 28 (pitch 112 mm, pitch 28 mm)
- **SBI/1 10x146:** International type (pitch 146 mm height 48 mm)
- **SBI/2 10x177:** "Euro" type (pitch 177 mm height 51mm)
- **SBc:** "Euro" type (pitch 177 mm height 51 mm) and radius of curvature of the sheet of 3 meters.
- **SB1p:** similar features to SBI but with flat edges (not wavy)

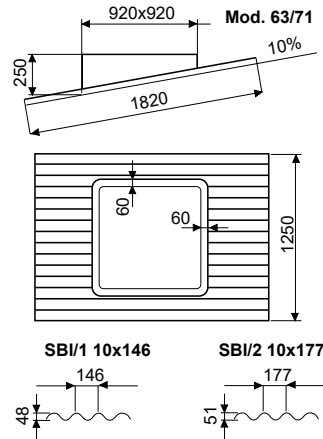
INSTALLATION

Overlap the valley to the slab downstream and under-place it upstream. Overlap not less than one and fourth wave with the lateral adjacent slabs (mod. **SB1g/1, SBI/1-2, SBc**). Verify not to have excessively overloaded the valley.

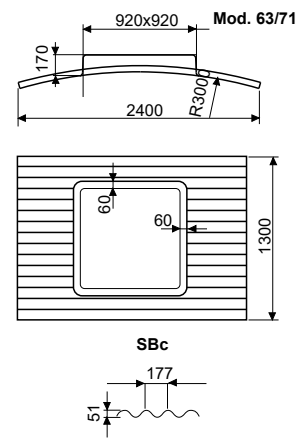
SB1g/1



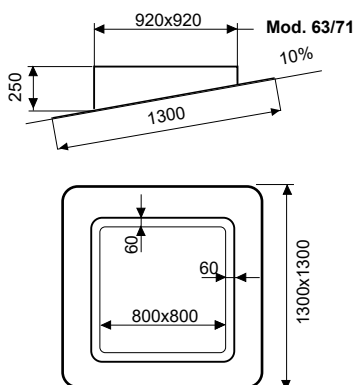
SBI/1 - SBI/2



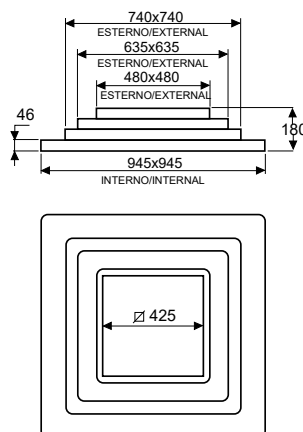
SBc



SB1p



SBr



SB1g/1 - SBI/1-2 - SBc - SB1p

per/for Mod. 606371



con/with **SBr**
per/for
Mod. 354045
505556