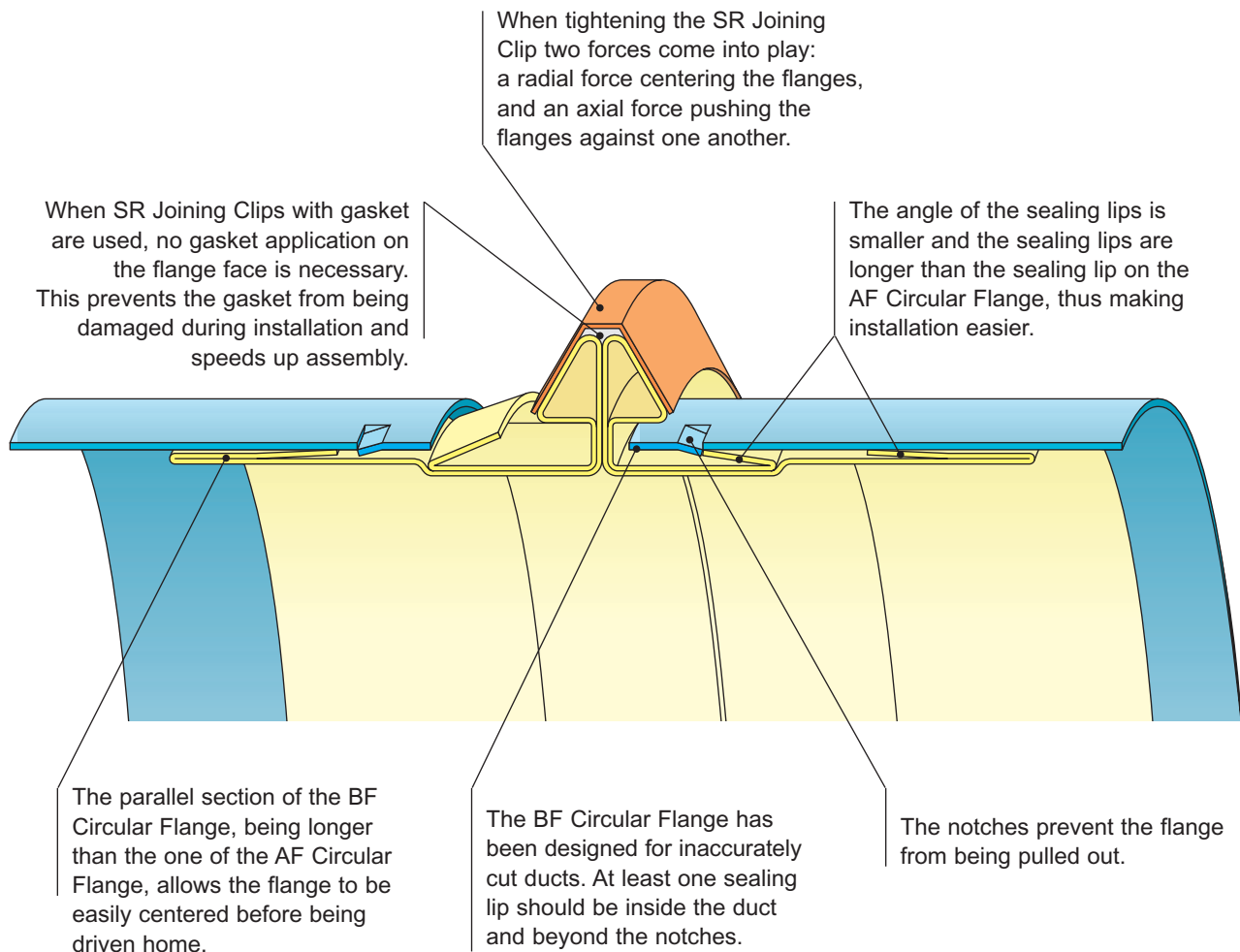




- **Longer length circular flanges with two sealing lips providing more flexibility.**
- **Duct ends do not need to be precisely cut.**
- **Can act as telescope section.**
- **Stiffens light gauge ductwork.**
- **The flanges are secured with notches into the duct.**
- **SR Joining Clips are used to assemble the ducts.**
- **For duct-Ø 200 up to 3000 mm.**



ADVANTAGES

Increased flexibility for fitting and assembly:

The BF Circular Flanges are made of a very wide profile which penetrates deeper into the duct. There are two sealing lips, which is very helpful for damaged or inaccurately cut ducts. The flanges also provide adjustment flexibility and can therefore be used as telescope sections. The longer flange spigot makes it easier to fit the BF Circular Flanges into the duct. This time saving helps compensating the flange's additional cost.

Optimal stability:

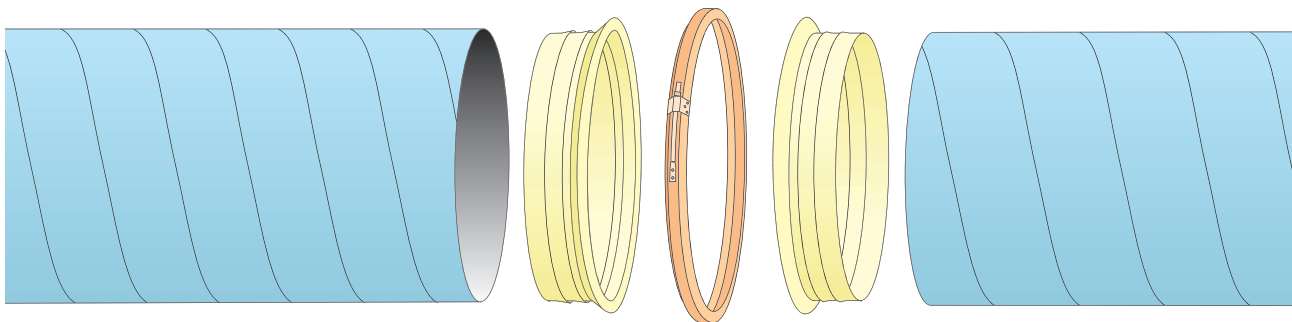
The especially wide hollow profile gives additional stability to the duct and provides a sturdy connection.

Air-tightness:

The pressed down sealing lips exert an enormous pressure on the duct wall. It is sufficient that one sealing lip is inside the duct beyond the notches to reach air-tight connections up to Eurovent Class C, assuming that the flange fitting and assembly have been carried out correctly. Please note that for ducts with stiffening ribs additional sealing is necessary (please refer to section B2.4 "Supersealed flanges") to achieve Eurovent Class C.

FEATURES

One connection is made of:



two BF Circular Flanges and one SR Joining Clip

Suitable for:			duct-Ø	Not suitable for:		
 spirally wound	 straight seam	 stiffening ribs	 200 to 3000 mm	 turned out edge	 fittings with turned out edge	 fittings with short ends

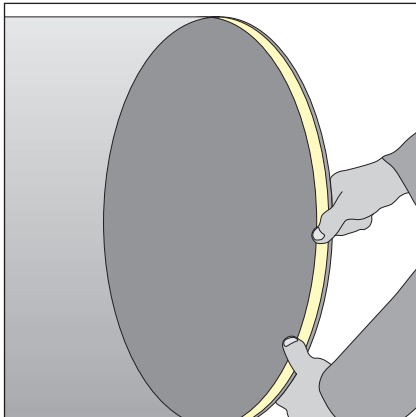
Dimensions:
(galvanized version)

There are three BF Circular Flange profile sizes (data in mm):

Circular Flange	duct-Ø	A	B	C	D	E	F	G	H	I
BF 20 - 45	200 - 499 mm	16,0	3,5	12,0	31,0	50,0	1,4	0,60	1,2	7
BF 50 - 90	500 - 999 mm	25,7	7,7	15,0	50,0	80,0	1,5	0,75	1,5	9
BF 100 - 160	1000 - 3000 mm	36,3	9,3	20,0	70,0	110,0	2,0	1,00	2,0	15

INSTRUCTIONS

1. Checking the duct diameter:

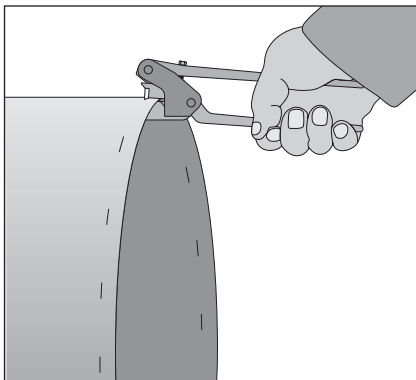


To ensure the correct functioning of the BF Circular Flange technique the duct diameter should be checked, at least randomly. MRF Measuring Bands from METU-SYSTEM allow to assess if the duct-Ø is exact and, if not, they provide the necessary information to order special dimension flanges

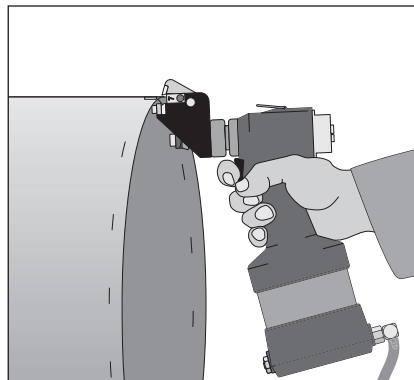
The MRF Measuring Band is placed inside the duct as shown and the end which overlaps should lie between the black and red marks, in which case a standard BF Circular Flange will fit. If the overlapping end lies outside this range, the difference in mm can be read and a special size flange can be ordered (for more information please refer to page 131 „MRF Measuring Bands“).

2. Creating the notches:

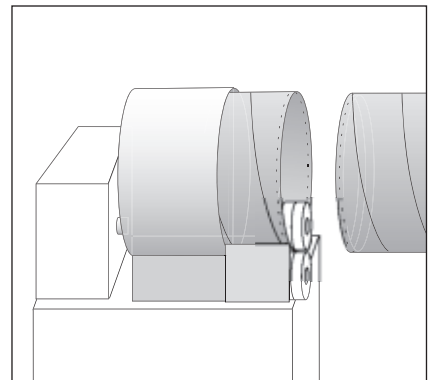
BF Circular Flanges are normally fixed into the duct with notches punched in the duct wall at approximately 100 mm intervals. For additional strength the intervals can be reduced to 50 mm. The distance from the duct end must be precise and the depth of the notches must be one time the duct wall thickness. Notches can be created by either one of the following methods:



Hand operation:
Hand Notching Tools from
Metu-System (catalog page 132)

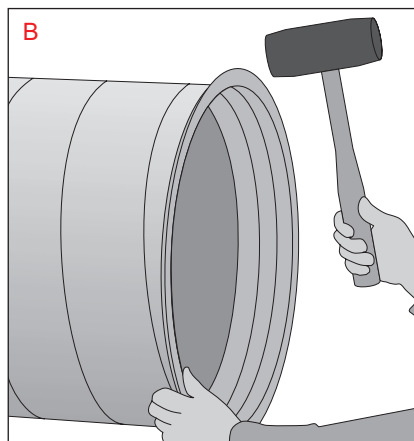
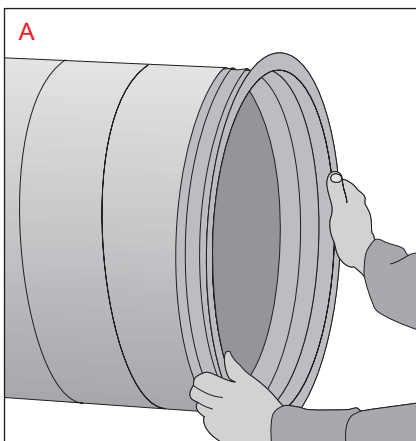


Semi-automatic operation:
Pneumatic Notching Tool from
Metu-System (catalog page 132)



Automatic operation:
NR Rotary Notchers from the company
SPIRO (catalog page 135)

3. Fitting the flange:



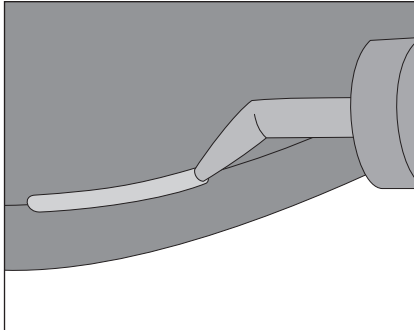
A Enter the BF Circular Flange into the end of the duct up to the start of the first tapered sealing lip. The long parallel section of the BF Circular Flange allows the flange to be easily centered.

B Use a rubber hammer to drive the flange home, starting where the flange ends meet. Assuming that the sealing lip and the duct wall are undamaged, the BF Circular Flange ensures an air-tight seal upto Eurovent Class C.

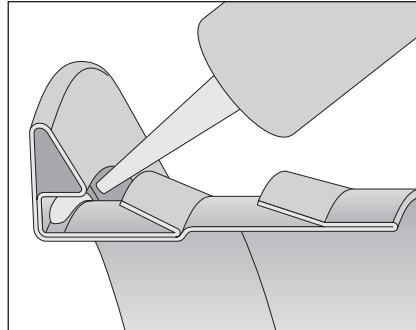
INSTRUCTIONS

4. Super sealed flanges:

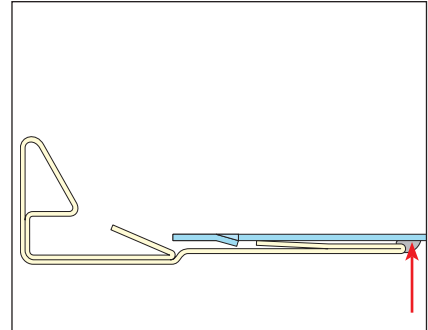
Correctly installed BF Circular Flanges fulfill the air-tightness requirements of the Eurovent Class C (0,28 l/s/m²). For higher requirements or if the generation of noise is feared (especially with pressures exceeding 1000 Pa), leakage can be further reduced by using the following methods:



A 100 mm long bead of mastic applied into the groove of the duct seam in the position where it crosses the flange's sealing lip will reduce leakage by 50% and would eliminate noise.



A fully air-tight joint is achieved by applying mastic into the groove of the flange before it is fitted into the duct. Important: The duct wall must penetrate into the sealer all around the flange!



An alternative to obtain a fully air-tight joint is to apply mastic inside the duct between the flange and the duct wall as depicted above after installation of the flange (not recommended for small duct-Ø).

More information regarding air-tightness of BF Circular Flanges is available in the "Additional Information" section page 153.

INSTALLATION

Please refer to catalog page 41 "SR Joining Clips".

DESIGNATION

BF Circular Flanges (galvanized steel)		
Art.No.	Designation	for duct-Ø
B02A-1001	BF 20 galv	200 mm
B02A-1002	BF 22 galv	224 mm
B02A-1003	BF 25 galv	250 mm
B02A-1004	BF 28 galv	280 mm
B02A-1005	BF 30 galv	300 mm
B02A-1006	BF 31 galv	315 mm
B02A-1007	BF 35 galv	355 mm
B02A-1008	BF 40 galv	400 mm
B02A-1009	BF 45 galv	450 mm
B02A-1010	BF 50 galv	500 mm
B02A-1011	BF 56 galv	560 mm
B02A-1012	BF 60 galv	600 mm
B02A-1013	BF 63 galv	630 mm
B02A-1014	BF 71 galv	710 mm
B02A-1015	BF 80 galv	800 mm
B02A-1016	BF 90 galv	900 mm
B02A-1017	BF 100 galv	1000 mm
B02A-1018	BF 112 galv	1120 mm
B02A-1019	BF 125 galv	1250 mm
B02A-1020	BF 140 galv	1400 mm
B02A-1021	BF 160 galv	1600 mm

BF Circular Flanges (stainless steel)		
Art.No.	Designation	for duct-Ø
B02B-1001	BF 20 V2A	200 mm
B02B-1002	BF 22 V2A	224 mm
B02B-1003	BF 25 V2A	250 mm
B02B-1004	BF 28 V2A	280 mm
B02B-1005	BF 30 V2A	300 mm
B02B-1006	BF 31 V2A	315 mm
B02B-1007	BF 35 V2A	355 mm
B02B-1008	BF 40 V2A	400 mm
B02B-1009	BF 45 V2A	450 mm
B02B-1010	BF 50 V2A	500 mm
B02B-1011	BF 56 V2A	560 mm
B02B-1012	BF 60 V2A	600 mm
B02B-1013	BF 63 V2A	630 mm
B02B-1014	BF 71 V2A	710 mm
B02B-1015	BF 80 V2A	800 mm
B02B-1016	BF 90 V2A	900 mm
B02B-1017	BF 100 V2A	1000 mm
B02B-1018	BF 112 V2A	1120 mm
B02B-1019	BF 125 V2A	1250 mm
B02B-1020	BF 140 V2A	1400 mm
B02B-1021	BF 160 V2A	1600 mm

For one connection you need 2 BF Circular Flanges and 1 SR Joining Clip. You will find the corresponding SR Joining Clips on catalog page 41. All intermediate sizes from 200 to 3000 mm are also available.

BF 20-90 flanges have a polyamid connection piece (please refer to page 145 in the Additional Information section).
 BF 100-160 flanges are welded.