CleaverBrooks

INDUSTRIAL POSITIVE PRESSURE PIPING SYSTEMS

GREASE DUCT SYSTEM

TECHNICAL DATA AND PARTS SELECTION

Models CBG, CBGL, CBGL2F & CBGL4F

UL and cUL listed

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LISTING AND APPLICATIONS

LISTINGS

Cleaver-Brooks venting systems models CBG, CBGL, CBGL2F and CBGL4F are listed by Underwritersa Laboratories, Inc. (UL) under file MH26661 and tested in accordance with UL 1978 standard for grease duct. These requirements cover grease duct and grease assemblies that are intended to be installed with less than or greater than 18" clearance as specified in the standard for removal of smoke and Grease-laden Vapors from Commercial Cooking Equipment, NFPA 96 or the individual listing intended for installations where the duct passes through partitions or walls of combustible material or where the duct is located in proximity to combustible building construction

UL 1978

MODEL CBGL,CBGL2F AND CBGL4F	TEMPERATURE	SIZE
Grease Duct	500°F continuous	6" to 48" I.D.

TESTING

Cleaver-Brooks resources include a test facility specially created to develop, test and demonstrate grease duct fire and leakage resistance. Test were conducted in the presence of UL inspectors according to UL 1978 standard for grease ducts.

APPLICATIONS

1. Grease duct models CBG, CBGL, CBGL2F and CBGL4F are suitable for use in installation using exhaust system components for the removal of smoke and grease laden vapors in commercial, industrial, institutional and similar type applications.
2. Models CBG, CBGL, CBGL2F and CBGL4F grease duct are intended for use as complete systems.
3. They can be connected to hoods, grease extractors, upblast exhasuter, in-lin or utility fans used in restaurants hotels and other food service application. They can also serve as supply duct in make-up/exhaust type systems.
4. installation of CBG, CBGL, CBGL2F and CBGL4F grease duct is made in accordance with Cleaver-Brooks installation instructions manual and NFPA 96 " standard for Ventilation Control and Fire Protection of Commercial Cooking Operations".
5. CBG, CBGL, CBGL2F and CBGL4F grease duct are suitable for continuous operation at temperatures not exceeding 500°F (260°C).

Other products and applications

CRITERIA	GREASE DUCT	BHA CHIMNEY	1400°F CHIMNEY
Application	Cooking appliances ventilation hoods restaurant grease ducts pizza oven exhausts.	• Low and high pressure steam boilers • Diesel and turbine exhausts • Building heating equipment	• Industrial furnaces • Processing equipment • Kilns and ovens • Diesel and turbine exhausts
Continuous operating temperature	500°F	1000°F	1400°F
CBIL, CBGL	Yes	Yes	Yes
CBIL2	Yes	Yes	N/A
CBIL2F, CBGL2F	N/A	Yes	Yes
CBIL4F, CBGL4F	Yes	Yes	N/A

DESIGN AND SPECIFICATION

DESIGN

All our double wall chimney systems are part of a large family of CBI (Industrial Positive Pressure) products for industrial and commercial applications. The components of each model are made using the same continuous laser welding stainless steel inner wall. Since all components have the same small and large ends, the parts of all models fit into one another, thus eliminating the need for all kinds of adapters and providing an incomparable flexibility in selecting models of flues and chimneys.

CBI, CBG: Single wall
(see Chimney Breechings and Liners Catalogue)

CBIL, CBGL : Double wall
with 2" air space

CBGL2: Double wall
with 2" mineral fiber insul.

CBIL2F, CBGL2F: Double wall
with 2" ceramic fiber insul.

CBIL4F, CBGL4F: Double wall
with 4" ceramic fiber insul.

This unique method for jointing components together is very efficient either in horizontal or in vertical installations. Our simple jointing concept along with the wide variety of components and accessories allows for a quick and simple installation, thus permitting you to save both time and money.

Cleaver-Brooks is proud of their industrial positive pressure piping systems. Recognized for being high quality products, they are also the easiest to install on the market!

These chimney systems are designed for exhaust of combustion gases, under positive, negative or neutral pressure, emanating from a variety of appliances including but not limited to:

- Diesel Engine and Gas Turbine Exhaust
- Restaurant Grease Duct
- Incinerator
- Coffee Roaster
- Air and Product containment
- Industrial Oven Exhaust
- Boiler Negative and Positive Pressure
- Unit Heater
- Heat Recovery

Models CBG, CBGL and CBGL2F provide a wide variety of components and accessories, suitable for all kinds of site conditions, thus allowing for quick and simple installation. Each component is packed and shipped complete, with (1) one assembly band and (1) one finishing band for those having large ends. Sufficient tubes of appropriate sealant are also included in the shipment for completing the assembly.

SAMPLE SPECIFICATION (boiler Exhaust)

The grease duct and conduit must meet UL (Underwriters Laboratories Inc.) and c-UL (Underwriters Laboratories of Canada inc.) standards and carry the appropriate approval labels. The maximum temperature must be 500°F (260°C) for continuous operation and the grease duct must have been tested to withstand a 2000°F (1094°C) temperature for thirty minutes.

The grease duct and conduit components must be of double wall construction and properly designed for positive pressure exhaust. The inner wall must be of 20 gauge 304 stainless steel, with continuous plasma welds. The outer wall must be of 24 gauge 304 stainless steel. A ceramic fiber insulation (2 in.) must be installed between walls. The jointing must be made using the assembly band, the finishing band and the appropriate sealing material, as supplied by the manufacturer. Quality required : Model CBGL2F.

All components must be installed according to the manufacturer recommendations and must meet the NFPA and local safety code requirements.

MATERIALS

MODEL CBG

Wall: 316L or 304 2B stainless steel (20 ga - 6" (152mm) to 40" (1016mm) diameter; 18 ga - 42" (1067mm) to 48" (1219mm) diameter)

MODEL CBGL

Inner wall: 316L or 304 2B stainless steel (20 ga - 6" (152mm) to 40" (1016mm) diameter; 18 ga - 42" (1067mm) to 48" (1219mm) diameter)
Outer wall: 301,316L, 304 2B stainless steel, 430 or galvalume(24 ga - 6" (152mm) to 40" (1016mm) diameter; 20 ga - 42" (1067mm) to 48" (1219mm) diameter)
Insulation: 2" (51mm) air space

MODEL CBGL2F

Inner wall: 316L or 304 2B stainless steel (20 ga - 6" (152mm) to 40" (1016mm) diameter; 18 ga - 42" (1067mm) to 48" (1219mm) diameter)
Outer wall: 301,316L, 304 2B stainless steel, 430 or galvalume (24 ga - 6" (152mm) to 40" (1016mm) diameter; 20 ga - 42" (1067mm) to 48" (1219mm) diameter)
Insulation: 2" (51mm) high temperature ceramic fiber

MODEL CBGL4F

Inner wall: 316L or 304 2B stainless steel (20 ga - 6" (152mm) to 40" (1016mm) diameter; 18 ga - 42" (1067mm) to 48" (1219mm) diameter)
Outer wall: 301,316L, 304 2B stainless steel, 430 or galvalume (24 ga - 6" (152mm) to 40" (1016mm) diameter; 20 ga - 42" (1067mm) to 48" (1219mm) diameter)
Insulation: 4" (51mm) high temperature ceramic fiber

SUPPORTS & ACCESSORIES

Galvanized steel, hot-galvanized steel, 316 L or 304 2B stainless steel

COMPONENTS	Internal walls		external walls		materials	
	STANDARD	AVAILABLE	STANDARD	AVAILABLE	STANDARD	AVAILABLE
LENGHTS, ADJUSTABLE LENGTH VARIABLE LENGTH	2	1	2	1	--	--
DUCT DRAIN/NOZZLE SECTION	2	1	2	1	--	--
TEES	2	1	2	1	--	--
WYE	2	1	2	1	--	--
ELBOWS	2	1	2	1	--	--
INCREASER/REDUCER	2	1	2	1	--	--
TEE CAPS	2	1	2	1	--	--
ASSEMBLY BAND	2	1	--	--	--	--
FINISHING BAND	--	--	2	1	--	--
TRANSITION ADAPTER	2	1	2	1	--	--
ANCHOR PLATE	2	1	2	1	3	1, 2 and 3
HANGER BRACKET	--	--	--	--	3	1, 2 and 4
WALL/HORIZONTAL SUPPORTS	2	1	2	1	3	1, 2 and 4
ROOF SUPPORT/GUIDING SPACER	--	--	--	--	3	1,2 and 4
WALL/FLOOR GUIDES	--	--	--	--	3	1, 2 and 4
FIRESTOS WALL FIRESTOPS	--	--	--	--	3	1 and 2
RADIANT FIRESTOPS	--	--	--	--	3	1 and 2
INSULATED SLEEVE, INSULATED WALL FIRESTOPS	--	--	--	--	3	1 and 2
WALL BAND, SUSPENSION BAND	--	--	--	--	3	1, 2 and 4
GUY WIRE BAND	--	--	--	--	2	1, 2 and 4
COLLARS, FLASHING	--	--	--	--	--	1 and 2
CLOSURE SECTION	2	1	2	1	--	--
EXHAUST CONE	2	1	2	1	--	--
FAN ADAPTER	2	1	2	1	--	--

1: 316 L stainless steel
2: 304 2B stainless steel
3: Galvanized steel
4: Hot-galvanized steel

WEIGHTS AND CLEARANCES

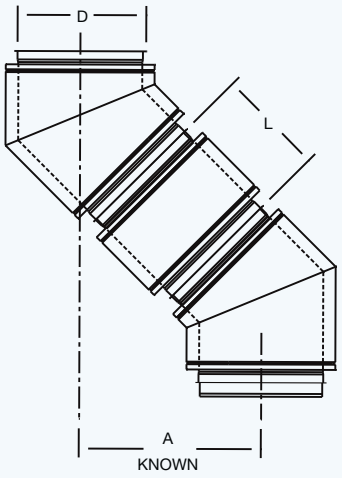
CBG ● CBGL ● CBGL2F ● CBGL4F				LINEAR WEIGHT							
I.D.		AREA		CBG		CBGL		CBGL2F		CBGL4F	
in	mm	in^2	$1000mm^2$	lb/ft	kg/m	lb/ft	kg/m	lb/ft	kg/m	lb/ft	kg/m
6	152	28	18.2	3.4	5.0	5.7	8.5	8.8	13.1	14.6	21.8
8	203	50	32.4	4.5	6.7	7.2	10.8	11.1	16.5	17.7	26.3
10	254	79	50.7	5.7	8.4	8.8	13.0	13.4	19.9	20.7	30.8
12	302	113	73.0	6.8	10.1	10.3	15.3	15.6	23.3	23.8	35.4
14	356	154	99.3	7.9	11.8	11.8	17.5	17.9	26.7	26.8	39.9
16	406	201	129.7	9.0	13.5	13.3	19.8	20.2	30.1	29.9	44.4
18	457	254	164.2	12.2	15.1	14.8	22.0	22.5	33.4	32.9	49.0
20	508	314	202.7	11.3	16.8	16.3	24.3	24.7	36.8	35.9	53.5
22	559	380	245.2	12.4	18.5	17.8	26.5	27.0	40.2	39.0	58.0
24	610	452	291.9	13.6	20.2	19.3	28.7	29.3	43.6	42.0	62.5
26	660	531	342.5	14.7	21.9	20.8	31.0	31.6	47.0	45.1	67.1
28	711	616	397.3	15.8	23.5	22.3	33.2	33.9	50.4	48.1	71.6
30	762	707	456.0	17.0	25.2	23.8	35.5	36.1	53.8	51.6	76.1
32	813	804	518.9	18.1	26.9	25.4	37.7	38.4	57.2	54.2	80.7
34	864	908	585.8	19.2	28.6	26.9	40.0	40.7	60.5	57.3	85.2
36	914	1018	656.7	20.3	30.3	28.4	42.2	43.0	64.9	60.3	89.7
38	965	1134	731.7	21.5	32.0	29.9	44.5	45.2	67.3	63.3	94.3
40	1016	1257	810.7	22.6	33.6	31.4	46.7	47.5	70.7	66.3	98.8
42	1067	1662	1072.2	26.0	38.7	50.4	75.0	68.9	102.5	90.6	134.9
48	1219	1810	1167.5	27.1	40.4	52.5	78.2	71.7	106.8	94.3	140.3

	Minimum clearance air sapce to combustible construction							
	Model CBG		Model GPDL		Model CBGL2F		Model CBGL4F	
D.I.	in	mm	in	mm	in	mm	in	mm
6” to 14”	18”	457	14”	355	4”	102	0”	0
16” to 22’	18”	457	16”	406	6”	152	0”	0
24” to 32”	18”	457	18”	457	8”	203	0”	0
32” to 38”	18”	457	20”	508	10”	254	0”	0
40” to 42”	18”	457	20”	508	10”	254	--	--
44” to 48”	18”	457	20”	508	12”	305	--	--

Minimum opening when installing a grease duct through a floor or wall made of combustible construction.
O.D. + 2 X (min. clearance air space) Ex. CBGL2F, O.D. = 12” ⇨ 12” + (2 X 4”) = 20”
Minimum opening when installing a grease duct through a floor or wall made of non combustible construction.
O.D. + 1” Ex. CBGL2F, O.D. = 12” ⇨ 12” + 1” = 13”

OFFSETS

OFFSET CALCULATIONS



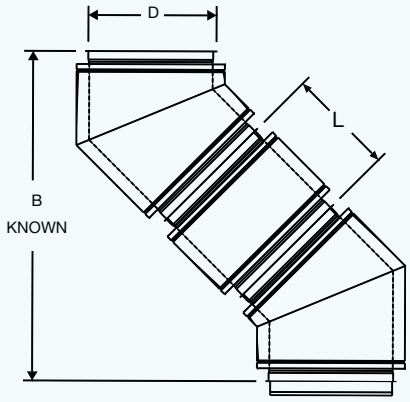
EFFECTIVE LENGTH CALCULATIONS

- OFFSET dimension is known
- Effective length is to be determined using equation 1, 2 or 3 depending on elbows used

1.	L(A) = 3.864(A) - 0.132D - 13”	15° elbows
2.	L(A) = 2(A) - 0.268D - 13”	30° elbows
3.	L(A) = 1.414(A) - 0.414D - 13”	45° elbows

EXAMPLE: An 8” Grease Duct using 2 - 45° elbows and 43” OFFSET (A) using equation 3:

3. L(A) = 1.414(A) - 0.414D - 13”
   L(A) = 1.414(44.75”) - 0.414(8”) - 13”
   L(A) = 47” in effective length choose a 48” length (48L)



EFFECTIVE LENGTH CALCULATIONS

- HEIGTH dimesnion is known
- Effective length is to be determined using equation 4, 5 or 6 depending on elbows used

4.	L(B) = 1.035(B) - 0.268D - 26.459”	15° elbows
5.	L(B) = 1.155(B) - 0.577D - 28.011”	30° elbows
6.	L(B) = 1.414(B) - D - 31.385”	45° elbows

EXAMPLE: A 10” Grease Duct using 2- 45° elbows and 51” HEIGTH (B) using equation 6:

6. L(B) = 1.414(B) - D - 31.385”
   L(B) = 1.414(55”) - 10” - 31.385”
   L(B) = 36.385” in effective length choose a 24” length (24L) + adjustable length (AL)

Refer to the elbows specific table for minimum offsets and heights of two matched elbows. For special conditions, we can manufacture one piece offset.

LENGTHS

STRAIGHT LENGTHS • 48L • 36L • 24L • 12L

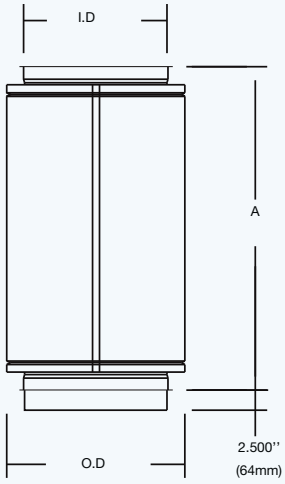
Available in 22 diameters from 6 to 48” (152 to 1219mm).
Standard lengths: 48” (1219mm), 36” (914mm), 24” (610mm) and 12” (305mm).
Includes:
1 Assembly band (AB)
1 Finishing band (FB)

K = 0.30 L/D

Where L = Pipe length in feet
D = Pipe diameter in inches

CBGL • CBGL2F			
I.D.		O.D.	
in	mm	in	mm
6	152	10	254
8	203	12	305
10	254	14	356
12	305	16	406
14	356	18	457
16	406	20	508
18	457	22	559
20	508	24	610
22	559	26	660
24	610	28	711
26	660	30	762
28	711	32	813
30	762	34	864
32	813	36	914
34	864	38	965
36	914	40	1016
38	965	42	1067
40	1016	44	1118
42	1067	46	1168
44	1118	48	1219
46	1168	50	1270
48	1219	52	1321

CBGL4F			
I.D.		O.D.	
in	mm	in	mm
6	152	14	356
8	203	16	406
10	254	18	457
12	305	20	508
14	356	22	559
16	406	24	610
18	457	26	660
20	508	28	711
22	559	30	762
24	610	32	813
26	660	34	864
28	711	36	914
30	762	38	965
32	813	40	1016
34	864	42	1067
36	914	44	1118
38	965	46	1168
40	1016	48	1219
42	1067	50	1270
44	1118	52	1321
46	1168	54	1372
48	1219	56	1422



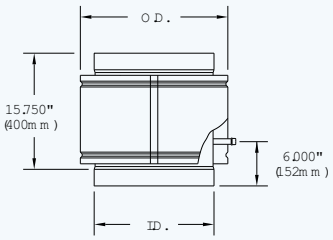
LENGTHS	EFFECTIVE LENGTHS “A”	
	in	mm
12” (305 mm)	11.000	279
24” (610 mm)	23.000	584
36” (914 mm)	35.000	889
48” (1219 mm)	47.000	1194

LENGTHS

NOZZEL SECTION • NS

Used to suppress fire or to connect to a cleaning system. To be connected to a drain of 1”Ø (25mm) – NPT.
Includes:
1 Assembly band (AB)
1 Finishing band (FB)

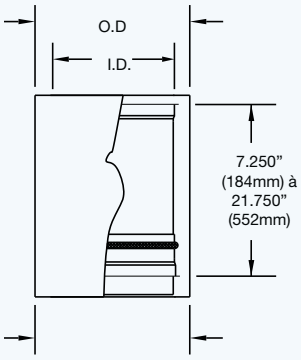
K = Same as pipe length



VARIABLE LENGTH • VL

Used to absorb linear expansion between two fixed points on low pressure applications.
Includes:
1 Assembly band (AB)
1 Outer wall 36” (914mm) long
1 Strip of insulation for CBGL2F systems

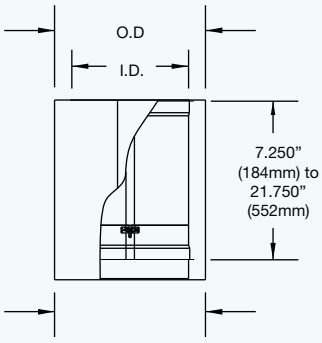
K = Same as pipe length



ADJUSTABLE LENGTH • AL

Used to complete on site installation precisely. It is not designed to compensate for linear expansion nor to support the vertical load of the chimney.
Includes:
1 Assembly band (AB)
1 Outer wall 36” (914mm) long
1 Strip of insulation for CBGL2F systems

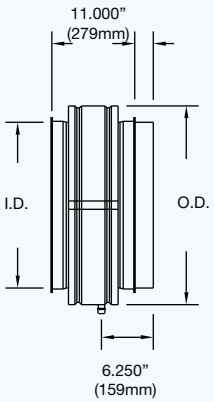
K = Same as pipe length



DUCT DRAIN • DD

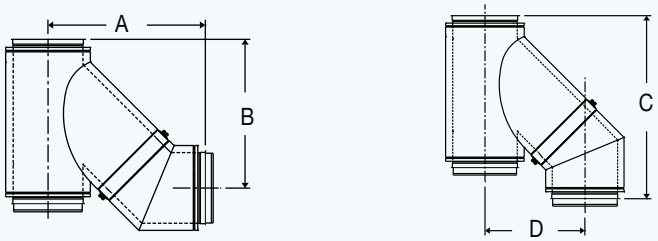
Used to collect rainwater or condensation water from inside vertical or horizontal flue. To be connected to a drain of 3/4”ø (19mm) - NPT.
Includes:
1 Assembly band (AB)
1 Finishing band (FB)

K = Same as pipe length



TEES

45º TEE and 45º ELBOW ASSEMBLY



CBGL • CBGL2F											
I.D.		O.D.		A		B		C		D	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
6	152	10	254	26.471	672	24.471	698	35.213	894	18.728	476
8	203	12	305	28.885	734	29.885	759	38.042	966	20.728	526
10	254	14	356	31.299	795	32.299	820	40.870	1038	22.728	577
12	305	16	406	33.713	856	34.713	882	43.698	1110	24.728	628
14	356	18	457	36.127	918	37.127	943	46.527	1182	26.728	679
16	406	20	508	38.542	979	39.542	1004	49.355	1254	28.728	730
18	457	22	559	40.956	1040	41.956	1066	52.184	1325	30.728	780
20	508	24	610	43.370	1102	44.370	1127	55.012	1397	32.728	831
22	559	26	660	45.784	1163	46.784	1188	57.841	1469	34.728	882
24	610	28	711	48.198	1224	49.198	1250	60.669	1541	36.728	933
26	660	30	762	50.613	1286	51.613	1311	63.497	1613	38.728	984
28	711	32	813	53.027	1347	54.027	1372	66.326	1685	40.728	1034
30	762	34	864	55.441	1408	56.441	1434	69.154	1757	42.728	1085
32	813	36	914	57.855	1470	58.855	1495	71.983	1828	44.728	1136
34	864	38	965	60.270	1531	61.270	1556	74.811	1900	46.728	1187
36	914	40	1016	62.684	1592	63.684	1618	77.640	1972	48.728	1238
38	965	42	1067	65.098	1653	66.098	1679	80.468	2044	50.728	1288
40	1016	44	1118	67.512	1715	68.512	1740	83.296	2116	52.728	1339
42	1067	46	1168	69.926	1776	70.926	1802	86.125	2188	54.728	1390
44	1118	48	1219	72.341	1837	73.341	1863	88.953	2259	56.728	1441
46	1168	50	1270	74.755	1899	75.755	1924	91.782	2331	58.728	1492
48	1219	52	1321	77.169	1960	78.169	1985	94.610	2403	60.728	1542

CBGL4F											
I.D.		O.D.		A		B		C		D	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
6	152	14	356	31.006	787	31.006	787	39.749	1009	22.263	565
8	203	16	406	33.420	848	33.420	848	42.577	1081	24.263	616
10	254	18	457	35.835	910	35.835	910	45.406	1153	26.263	667
12	304	20	508	38.249	971	38.249	971	48.234	1225	28.263	717
14	355	24	558	40.663	1032	40.663	1032	51.062	1297	30.263	768
16	406	22	610	43.077	1094	43.077	1094	53.891	1368	32.263	819
18	457	26	660	45.491	1155	45.491	1155	56.719	1440	34.263	870
20	508	28	711	47.906	1216	47.906	1216	59.548	1512	36.263	921
22	610	30	762	50.320	1278	50.320	1278	62.376	1584	38.263	972
24	609	32	812	52.734	1339	52.734	1339	65.205	1656	40.263	1022
26	660	34	863	55.148	1400	55.148	1400	68.033	1728	42.263	1073
28	711	36	914	57.562	1642	57.562	1642	70.861	1799	44.263	1124
30	762	38	965	59.977	1523	59.977	1523	73.690	1871	46.263	1175
32	812	40	1016	62.391	1584	62.391	1584	76.518	1943	48.263	1225
34	863	42	1066	64.805	1646	64.805	1646	79.347	2015	50.263	1276
36	914	44	1117	67.219	1707	67.219	1707	82.175	2087	52.263	1327
38	965	46	1168	69.634	1768	69.634	1768	85.004	2159	54.263	1378
40	1016	48	1219	72.048	1830	72.048	1830	87.832	2230	56.263	1429
42	1066	50	1270	74.462	1891	74.462	1891	90.660	2302	58.263	1479
44	1117	52	1320	76.876	1952	76.876	1952	93.489	2374	60.263	1530
46	1168	54	1371	79.290	2014	79.290	2014	96.317	2446	62.263	1281
48	1219	56	1422	81.705	2075	81.705	2075	99.146	2518	64.263	1632

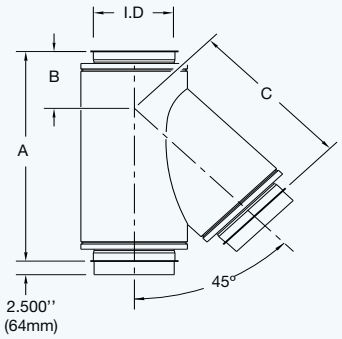
TEES

45° TEE • T45

For connection of vertical and horizontal lengths at a 45° angle. It provides low resistance to facilitate gas discharge. A tee cap (TC) or drain-tee cap (DC) may be used to block one of the cleaning or drainage openings.

Includes:
1 Assembly band (AB)
1 Finishing band (FB)

K = 0.4



CBGL • CBGL2F							
I.D.		A		B		C	
in	mm	in	mm	in	mm	in	mm
6	152	27.485	698	8.743	222	18.743	476
8	203	30.314	770	9.157	233	21.157	537
10	254	33.142	842	9.571	243	23.571	599
12	305	35.971	914	9.985	254	25.985	660
14	356	38.799	985	10.399	264	28.399	721
16	406	41.627	1057	10.814	275	30.814	783
18	457	44.456	1129	11.228	285	33.228	844
20	508	47.284	1201	11.642	296	35.642	905
22	559	50.113	1273	12.056	306	38.056	967
24	610	52.941	1345	12.471	317	40.471	1028
26	660	55.770	1417	12.885	327	42.885	1089
28	711	58.598	1488	13.299	338	45.299	1151
30	762	61.426	1560	13.713	348	47.713	1212
32	813	64.255	1632	14.127	359	50.127	1273
34	864	67.083	1704	14.542	369	52.542	1335
36	914	69.912	1776	14.956	380	54.956	1396
38	965	72.740	1848	15.370	390	57.370	1457
40	1016	75.569	1919	15.784	401	59.784	1519
42	1067	78.397	1991	16.198	411	62.198	1580
44	1118	81.225	2063	16.613	422	64.613	1641
46	1168	84.054	2135	17.027	432	67.027	1702
48	1219	86.882	2207	17.441	443	69.441	1764

CBGL4F							
I.D.		A		B		C	
in	mm	in	mm	in	mm	in	mm
6	152	31.485	799	8.743	222	22.743	577
8	203	34.314	871	9.157	232	25.157	639
10	254	37.142	943	9.571	243	27.571	700
12	305	39.791	1015	9.985	253	29.985	761
14	356	42.799	1087	10.399	264	32.399	822
16	406	45.627	1158	10.814	274	34.814	884
18	457	48.456	1280	11.228	285	37.228	945
20	508	51.284	1302	11.642	295	39.642	1006
22	559	54.113	1374	12.056	306	42.056	1068
24	610	56.941	1446	12.471	316	44.471	1129
26	660	59.770	1518	12.885	327	46.885	1190
28	711	62.598	1590	13.299	337	49.299	1252
30	762	65.426	1661	13.713	348	51.713	1313
32	813	68.255	1733	14.127	358	54.127	1374
34	864	71.083	1805	14.542	369	56.542	1436
36	914	73.912	1877	14.956	379	58.956	1497
38	965	76.740	1949	15.370	390	61.370	1558
40	1016	79.569	2021	15.784	400	63.784	1620
42	1067	82.397	2092	16.198	411	66.198	1681
44	1118	85.225	2164	16.613	422	68.613	1742
46	1168	88.054	2236	17.027	432	71.027	1804
48	1219	90.882	2308	17.441	433	73.441	1865

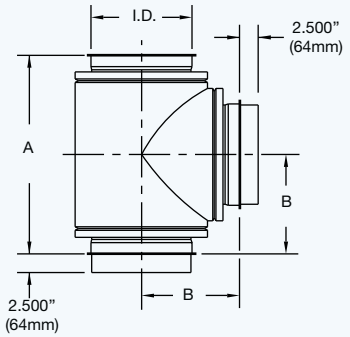
TEES

90° TEE • T90 and GREASE DUCT TEE (GT90)

For connection of vertical and horizontal lengths. May be used for the installation of a draft regulator at the point of connection between the flue and the appliance. A tee cap (TC) or drain-tee cap (DC) may be used to block one of the cleaning or drainage openings.

Includes:
1 Assembly band (AB)
1 Finishing band (FB)

K = 1.25



CBGL • CBGL2F					
I.D.		A		B	
in	mm	in	mm	in	mm
6	152	19	438	9.5	241
8	203	21	533	10.5	267
10	254	23	584	11.5	292
12	305	25	635	12.5	318
14	356	27	686	13.5	343
16	406	29	737	14.5	368
18	457	31	787	15.5	394
20	508	33	838	16.5	419
22	559	35	889	17.5	445
24	610	37	940	18.5	470
26	660	39	991	19.5	495
28	711	41	1041	20.5	521
30	762	43	1092	21.5	546
32	813	45	1143	22.5	572
34	864	47	1194	23.5	597
36	914	49	1245	24.5	622
38	965	51	1295	25.5	648
40	1016	53	1346	26.5	673
42	1067	55	1397	27.5	699
44	1118	57	1448	28.5	724
46	1168	59	1499	29.5	749
48	1219	61	1549	30.5	775

CBGL4F					
I.D.		A		B	
in	mm	in	mm	in	mm
6	152	23.000	584	11.500	292
8	203	25.000	635	12.500	318
10	254	27.000	686	13.500	343
12	305	29.000	737	14.500	368
14	356	31.000	787	15.500	394
16	406	33.000	838	16.500	419
18	457	35.000	889	17.500	445
20	508	37.000	940	18.500	470
22	559	39.000	991	19.500	495
24	610	41.000	1041	20.500	521
26	660	43.000	1092	21.500	546
28	711	45.000	1143	22.500	572
30	762	47.000	1194	23.500	597
32	813	49.000	1245	24.500	622
34	364	51.000	1295	25.500	648
36	914	53.000	1346	26.500	673
38	965	55.000	1397	27.500	699
40	1016	57.000	1448	28.500	724
42	1067	59.000	1499	29.500	749
44	1118	61.000	1549	30.500	775
46	1168	63.000	1600	31.500	800
48	1219	65.000	1651	32.500	826

TEES

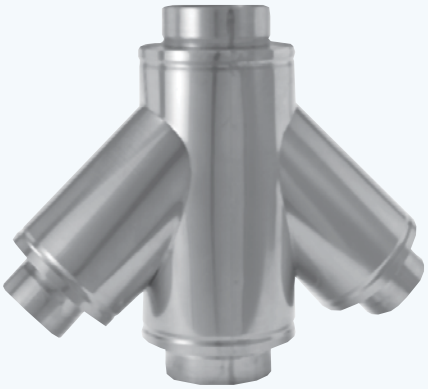
DOUBLE 45° TEE (DT45)

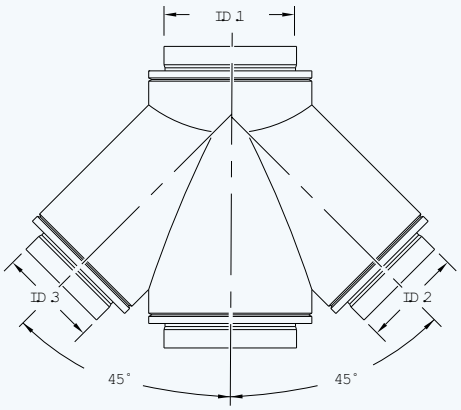
Used to connect two systems together with a minimum resistance to flow. A tee cap (TC) or drain-tee cap (DC) may be used to block one of the bases of the piece, for cleaning or drainage. Specify the diameters of inlets and outlets of the fitting.

Includes:

1 Assembly band (AB)
1 Finishing band (FB)

K = 0.4





TEES

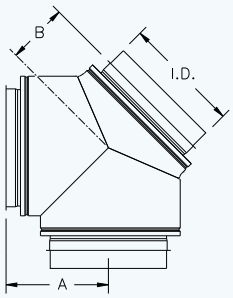
90° WYE (W90)

Used to offset the grease duct or conduit by 90°. Facilitates access for inspection and maintenance of the grease duct or conduit. A tee cap (TC) may be used to block one of the
cleaning openings.

Includes:

2 Assembly bands (AB)
2 Finishing bands (FB)

K = 0.6



CBGL ● CBGL2F							
I.D.		A		B		C	
in	mm	in	mm	in	mm	in	mm
6	152	26.235	666	6.993	178	19.243	489
8	203	19.064	738	7.407	188	21.657	550
10	254	31.892	810	7.821	199	24.071	611
12	305	34.721	882	8.235	209	26.485	673
14	356	37.549	954	8.649	220	28.889	734
16	406	40.377	1026	9.024	230	31.314	795
18	457	43.206	1097	9.478	241	33.728	857
20	508	46.034	1169	9.892	251	36.142	918
22	559	48.863	1241	10.306	262	38.556	979
24	610	51.691	1313	10.721	272	40.971	1041
26	660	54.520	1385	11.135	283	43.385	1102
28	711	57.348	1457	11.549	293	45.799	1163
30	762	60.176	1528	11.963	304	48.213	1225
32	813	63.005	1600	12.377	314	50.627	1286
34	864	65.833	1672	12.792	325	53.042	1347
36	914	68.662	1744	13.206	335	55.456	1409
38	965	71.490	1816	13.260	346	57.870	1470
40	1016	74.319	1888	14.034	356	60.284	1531
42	1067	77.147	1960	14.448	367	62.628	1593
44	1118	79.975	2031	14.863	378	65.113	1654
46	1168	82.804	2103	15.277	388	67.527	1715
48	1219	85.632	2175	15.691	399	69.941	1777

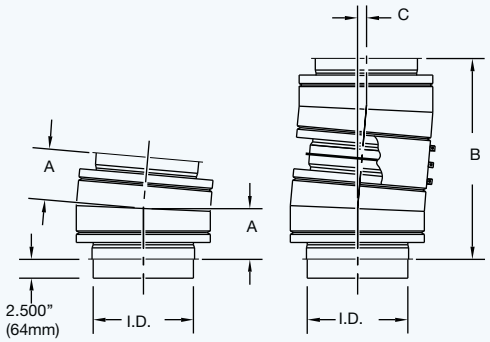
CBGL4F							
I.D.		A		B		C	
in	mm	in	mm	in	mm	in	mm
6	152	27.485	698	8.743	222	18.743	476
8	203	30.314	770	9.157	233	21.157	537
10	254	33.142	842	9.571	243	23.571	599
12	305	35.971	914	9.985	254	25.985	660
14	356	38.799	985	10.399	264	28.399	721
16	406	41.627	1057	10.814	275	30.814	783
18	457	44.456	1129	11.228	285	33.228	844
20	508	47.284	1201	11.642	296	35.642	905
22	559	50.113	1273	12.056	306	38.056	967
24	610	52.941	1345	12.471	317	40.471	1028
26	660	55.770	1417	12.885	327	42.885	1089
28	711	58.598	1488	13.299	338	45.299	1151
30	762	61.426	1560	13.713	348	47.713	1212
32	813	64.255	1632	14.127	359	50.127	1273
34	864	67.083	1704	14.542	369	52.542	1335
36	914	69.912	1776	14.956	380	54.956	1396
38	965	72.740	1848	15.370	390	57.370	1457
40	1016	75.569	1919	15.784	401	59.784	1519
42	1067	78.397	1991	16.198	411	62.198	1580
44	1118	81.225	2063	16.613	422	64.613	1641
46	1168	84.054	2135	17.027	432	67.027	1702
48	1219	86.882	2207	17.441	443	69.441	1764

ELBOWS

5° ELBOW • E5

Used to offset the flue or chimney by 5˚. May be used to slope a flue to facilitate condensation water run-off.
Includes:
1 Assembly band (AB)
1 Finishing band (FB)

K = 0.04



CBGL • CBGL2F							
I.D.		A		B		C	
in	mm	in	mm	in	mm	in	mm
6	152	6.631	168	26.473	672	1.156	29
8	203	6.675	170	26.648	677	1.163	30
10	254	6.718	171	26.822	681	1.171	30
12	305	6.762	172	26.996	686	1.179	30
14	356	6.806	173	27.171	690	1.186	30
16	406	6.849	174	27.345	695	1.194	30
18	457	6.893	175	27.519	699	1.202	31
20	508	6.937	176	27.694	703	1.209	31
22	559	6.980	177	27.868	708	1.217	31
24	610	7.024	178	28.042	712	1.224	31
26	660	7.068	180	28.217	717	1.232	31
28	711	7.111	181	28.391	721	1.240	31
30	762	7.155	182	28.595	726	1.247	32
32	813	7.199	183	28.740	730	1.255	32
34	864	7.242	184	28.914	734	1.262	32
36	914	7.286	185	29.088	739	1.270	32
38	965	7.330	186	29.262	743	1.278	32
40	1016	7.373	187	29.437	748	1.285	33
42	1067	7.417	188	29.611	752	1.293	33
44	1118	7.461	189	29.785	757	1.300	33
46	1168	7.504	191	29.960	761	1.308	33
48	1219	7.548	192	30.134	765	1.316	33

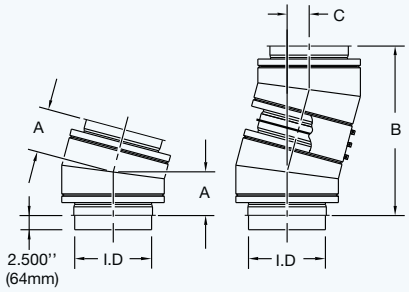
CBGL4F							
I.D.		A		B		C	
in	mm	in	mm	in	mm	in	mm
6	152	7.631	194	30.466	774	1.330	34
8	203	7.675	195	30.640	778	1.338	34
10	254	7.718	196	30.814	783	1.345	34
12	305	7.762	197	30.989	787	1.353	34
14	356	7.806	198	31.163	792	1.361	35
16	406	7.849	199	31.337	796	1.368	35
18	457	7.893	200	31.512	800	1.376	35
20	508	7.937	202	31.686	805	1.383	35
22	559	7.980	203	31.860	809	1.391	35
24	610	8.024	204	32.035	814	1.399	36
26	660	8.068	205	32.209	818	1.406	36
28	711	8.111	206	32.383	823	1.414	36
30	762	8.155	207	32.558	827	1.421	36
32	813	8.199	208	32.732	831	1.429	36
34	864	8.242	209	32.906	836	1.437	36
36	914	8.286	210	33.081	840	1.444	37
38	965	8.330	212	33.255	845	1.452	37
40	1016	8.373	213	33.429	849	1.460	37
42	1067	8.417	214	33.603	854	1.467	37
44	1118	8.461	215	33.778	858	1.475	37
46	1168	8.504	216	33.952	862	1.482	38
48	1219	8.548	217	34.126	867	1.490	38

ELBOWS

15° ELBOW • E15

Used to offset the flue or chimney by 15°.
Includes:
1 Assembly band (AB)
1 Finishing band (FB)

K = 0.06



CBGL • CBGL2F							
I.D.		A		B		C	
in	mm	in	mm	in	mm	in	mm
6	152	6.895	175	27.110	689	3.569	91
8	203	7.027	178	27.628	702	3.637	92
10	254	7.158	182	28.145	715	3.705	94
12	305	7.290	185	28.663	728	3.774	96
14	356	7.422	189	29.181	741	3.842	98
16	406	7.553	192	29.698	754	3.910	99
18	457	7.685	195	30.216	767	3.978	101
20	508	7.817	199	30.733	781	4.046	103
22	559	7.948	202	31.251	794	4.114	105
24	610	8.080	205	31.769	807	4.182	106
26	660	8.211	209	32.804	820	4.251	108
28	711	8.343	212	32.322	833	4.319	110
30	762	8.475	215	33.322	846	4.387	111
32	813	8.606	219	33.839	860	4.455	113
34	864	8.738	222	34.357	873	4.523	115
36	914	8.870	225	34.875	886	4.591	117
38	965	9.001	229	35.392	899	4.659	118
40	1016	9.133	232	35.910	912	4.728	120
42	1067	9.265	235	36.427	925	4.796	122
44	1118	9.396	239	36.945	938	4.864	124
46	1168	9.528	242	37.463	952	4.932	125
48	1219	9.660	245	37.980	965	5.000	127

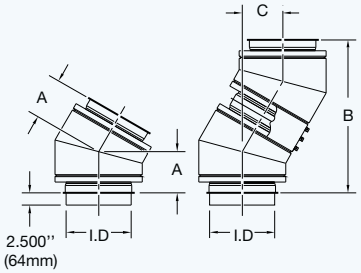
CBGL4F							
I.D.		A		B		C	
in	mm	in	mm	in	mm	in	mm
6	152	7.895	201	31.042	788	4.087	104
8	203	8.027	204	31.559	802	4.155	106
10	254	8.158	207	32.077	815	4.223	107
12	305	8.290	211	32.595	828	4.291	109
14	356	8.422	214	33.112	841	4.359	111
16	406	8.553	217	33.630	854	4.427	112
18	457	8.685	221	34.148	867	4.496	114
20	508	8.817	224	34.665	880	4.564	116
22	559	8.948	227	35.183	894	4.632	118
24	610	9.080	231	35.701	907	4.700	119
26	660	9.211	234	36.218	920	4.769	121
28	711	9.343	237	36.736	933	4.836	123
30	762	9.475	241	37.253	946	4.905	125
32	813	9.606	244	37.771	959	4.973	126
34	864	9.738	247	38.289	973	5.041	128
36	914	9.870	251	38.806	986	5.109	130
38	965	10.001	254	39.324	999	5.177	131
40	1016	10.133	257	39.842	1012	5.245	133
42	1067	10.265	261	40.359	1025	5.313	135
44	1118	10.396	264	40.877	1038	5.382	137
46	1168	10.528	267	41.395	1051	5.450	138
48	1219	10.660	271	41.912	1065	5.518	140

ELBOWS

30° ELBOW • E30

Used to offset the flue or chimney by 30˚.
Includes:
1 Assembly band (AB)
1 Finishing band (FB)

K = 0.12



CBGL • CBGL2F							
I.D.		A		B		C	
in	mm	in	mm	in	mm	in	mm
6	152	7.304	186	27.258	692	7.304	186
8	203	7.572	192	28.258	718	7.527	192
10	254	7.894	199	29.258	743	7.840	199
12	305	8.108	206	30.258	769	8.108	206
14	356	8.376	213	31.258	794	8.376	213
16	406	8.644	220	32.258	819	8.644	220
18	457	8.912	226	33.258	845	8.912	226
20	508	9.179	233	34.258	870	9.179	226
22	559	9.447	240	35.258	896	9.447	240
24	610	9.715	247	36.258	921	9.715	247
26	660	9.983	254	37,258	946	9.983	254
28	711	10.251	260	38.258	972	10.251	260
30	762	10,519	267	39.258	997	10.519	267
32	813	10.787	274	40.258	1023	10.787	274
34	864	11.055	281	41.258	1048	11.055	281
36	914	11.323	288	42.258	1073	11.323	288
38	965	11,591	294	43.258	1099	11.591	294
40	1016	11.859	301	44.258	1124	11.859	301
42	1067	12.127	308	45.258	1150	12.127	308
44	1118	12.395	315	46.258	1175	12.395	315
46	1168	12.663	322	47.258	1200	12.663	322
48	1219	12.931	328	48.258	1226	12.931	328

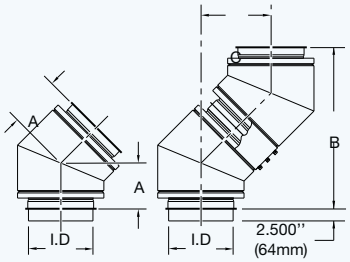
CBGL4F							
I.D.		A		B		C	
in	mm	in	mm	in	mm	in	mm
6	152	27.485	698	8.743	222	18.743	476
8	203	30.314	770	9.157	233	21.157	537
10	254	33.142	842	9.571	243	23.571	599
12	305	35.971	914	9.985	254	25.985	660
14	356	38.799	985	10.399	264	28.399	721
16	406	41.627	1057	10.814	275	30.814	783
18	457	44.456	1129	11.228	285	33.228	844
20	508	47.284	1201	11.642	296	35.642	905
22	559	50.113	1273	12.056	306	38.056	967
24	610	52.941	1345	12.471	317	40.471	1028
26	660	55.770	1417	12.885	327	42.885	1089
28	711	58.598	1488	13.299	338	45.299	1151
30	762	61.426	1560	13.713	348	47.713	1212
32	813	64.255	1632	14.127	359	50.127	1273
34	864	67.083	1704	14.542	369	52.542	1335
36	914	69.912	1776	14.956	380	54.956	1396
38	965	72.740	1848	15.370	390	57.370	1457
40	1016	75.569	1919	15.784	401	59.784	1519
42	1067	78.397	1991	16.198	411	62.198	1580
44	1118	81.225	2063	16.613	422	64.613	1641
46	1168	84.054	2135	17.027	432	67.027	1702
48	1219	86.882	2207	17.441	443	69.441	1764

ELBOWS

45° ELBOW • E45

Used to offset the flue or chimney by 45˚.
Includes:
1 Assembly band (AB)
1 Finishing band (FB)

K = 0.15



CBGL • CBGL2F							
I.D.		A		B		C	
in	mm	in	mm	in	mm	in	mm
6	152	26.235	666	6.993	178	19.243	489
8	203	19.064	738	7.407	188	21.657	550
10	254	31.892	810	7.821	199	24.071	611
12	305	34.721	882	8.235	209	26.485	673
14	356	37.549	954	8.649	220	28.889	734
16	406	40.377	1026	9.024	230	31.314	795
18	457	43.206	1097	9.478	241	33.728	857
20	508	46.034	1169	9.892	251	36.142	918
22	559	48.863	1241	10.306	262	38.556	979
24	610	51.691	1313	10.721	272	40.971	1041
26	660	54.520	1385	11.135	283	43.385	1102
28	711	57.348	1457	11.549	293	45.799	1163
30	762	60.176	1528	11.963	304	48.213	1225
32	813	63.005	1600	12.377	314	50.627	1286
34	864	65.833	1672	12.792	325	53.042	1347
36	914	68.662	1744	13.206	335	55.456	1409
38	965	71.490	1816	13.260	346	57.870	1470
40	1016	74.319	1888	14.034	356	60.284	1531
42	1067	77.147	1960	14.448	367	62.628	1593
44	1118	79.975	2031	14.863	378	65.113	1654
46	1168	82.804	2103	15.277	388	67.527	1715
48	1219	85.632	2175	15.691	399	69.941	1777

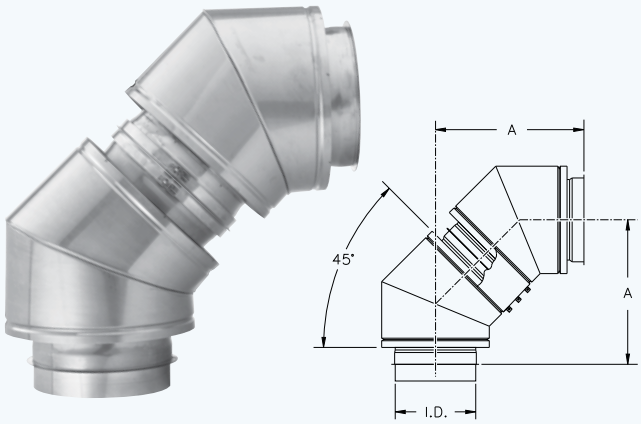
CBGL4F							
I.D.		A		B		C	
in	mm	in	mm	in	mm	in	mm
6	152	27.485	698	8.743	222	18.743	476
8	203	30.314	770	9.157	233	21.157	537
10	254	33.142	842	9.571	243	23.571	599
12	305	35.971	914	9.985	254	25.985	660
14	356	38.799	985	10.399	264	28.399	721
16	406	41.627	1057	10.814	275	30.814	783
18	457	44.456	1129	11.228	285	33.228	844
20	508	47.284	1201	11.642	296	35.642	905
22	559	50.113	1273	12.056	306	38.056	967
24	610	52.941	1345	12.471	317	40.471	1028
26	660	55.770	1417	12.885	327	42.885	1089
28	711	58.598	1488	13.299	338	45.299	1151
30	762	61.426	1560	13.713	348	47.713	1212
32	813	64.255	1632	14.127	359	50.127	1273
34	864	67.083	1704	14.542	369	52.542	1335
36	914	69.912	1776	14.956	380	54.956	1396
38	965	72.740	1848	15.370	390	57.370	1457
40	1016	75.569	1919	15.784	401	59.784	1519
42	1067	78.397	1991	16.198	411	62.198	1580
44	1118	81.225	2063	16.613	422	64.613	1641
46	1168	84.054	2135	17.027	432	67.027	1702
48	1219	86.882	2207	17.441	443	69.441	1764

ELBOWS

90° ELBOW • 2 x E45

Used to change orientation of flue or chimney by 90°.
Includes:
2 45° Elbows (E45)
2 Assembly bands (AB)
2 Finishing bands (FB)

K = 0.3

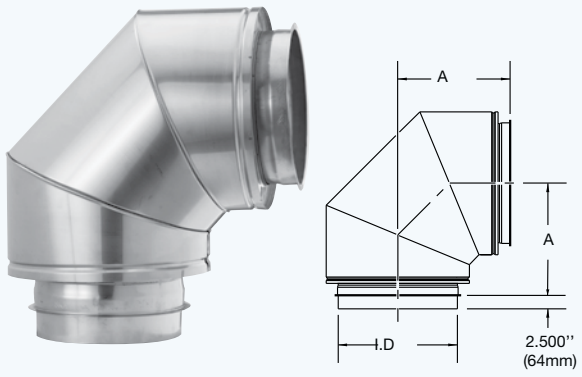


CBGL • CBGL2F				CBGL4F			
I.D.		A		I.D.		A	
in	mm	in	mm	in	mm	in	mm
6	152	18.692	475	6	152	19.692	500
8	203	19.692	500	8	203	20.692	526
10	254	20.692	526	10	254	21.692	551
12	305	21.692	551	12	305	22.692	576
14	356	22.692	576	14	356	23.692	602
16	406	23.692	602	16	406	24.692	627
18	457	24.693	627	18	457	25.692	653
20	508	25.692	653	20	508	26.692	678
22	559	26.692	678	22	559	27.692	703
24	610	27.692	703	24	610	28.692	729
26	660	28.692	729	26	660	29.692	754
28	711	29.692	754	28	711	30.692	780
30	762	30.692	780	30	762	31.692	805
32	813	31.692	805	32	813	32.692	805
34	864	32.692	830	34	864	33.692	856
36	914	33.692	856	36	914	34.692	881
38	965	34.692	881	38	965	35.692	907
40	1016	35.692	907	40	1016	36.692	932
42	1067	36.692	932	42	1067	37.692	957
44	1118	37.692	957	44	1118	38.692	938
46	1168	38.692	983	46	1168	39.692	1008
48	1219	36.692	1008	48	1219	40.692	1034

90° SHORT RADIUS ELBOW • E90

Used to change orientation of flue or chimney by 90°.
Includes:
1 Assembly band (AB)
1 Finishing band (FB)

K = 0.3



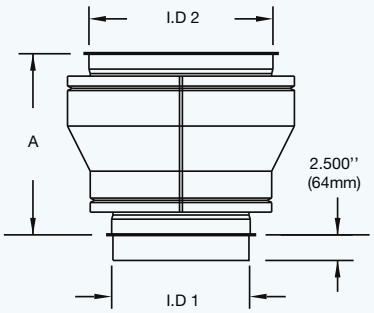
CBGL • CBGL2F				CBGL4F			
I.D.		A		I.D.		A	
in	mm	in	mm	in	mm	in	mm
6	152	12.328	313	6	152	14.743	374
8	203	13.328	339	8	203	15.743	400
10	254	14.328	364	10	254	16.743	425
12	305	15.328	389	12	305	17.743	451
14	356	16.328	415	14	356	18.743	476
16	406	17.328	440	16	406	19.743	501
18	457	18.328	466	18	457	20.743	527
20	508	19.328	491	20	508	21.743	552
22	559	20.328	516	22	559	22.743	578
24	610	21.328	542	24	610	23.743	603
26	660	22.328	567	26	660	24.743	628
28	711	23.328	593	28	711	25.743	654
30	762	24.328	618	30	762	26.743	679
32	813	25.328	643	32	813	27.743	705
34	864	26.328	669	34	864	28.743	730
36	914	27.328	694	36	914	29.743	755
38	965	28.328	720	38	965	30.743	781
40	1016	29.328	745	40	1016	31.743	806
42	1067	30.328	770	42	1067	32.743	832
44	1118	31.328	796	44	1118	33.743	857
46	1168	32.328	821	46	1168	34.743	882
48	1219	33.328	847	48	1219	35.743	908

FITTINGS

INCREASER • I

Used to increase the diameter of the flue or chimney. Specify the diameter of the inlet and outlet of the fitting.
Includes:
1 Assembly band (I.D. 2) (AB)
1 Finishing band (O.D. 2) (FB)

$$K = 0.5\left(1-\left(\frac{I.D.1}{I.D.2}\right)^2\right)^2$$

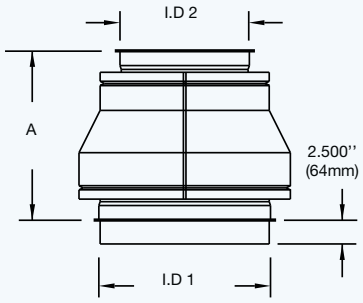


Difference between I.D 2 - I.D. 1	CBGL • CBGL2F • CBGL4F Dim. A	
	in	mm
2	15.000	381
4	19.000	483
6	23.000	585
8	27.000	687
10	31.000	789

REDUCER • R

Used to reduce the diameter of the flue. Specify the diameter of the inlet and outlet of the fitting.
Includes:
1 Assembly band (I.D. 2) (AB)
1 Finishing band (O.D. 2) (FB)

$$K = 0.5\left(1-\left(\frac{I.D.1}{I.D.2}\right)^2\right)^2$$

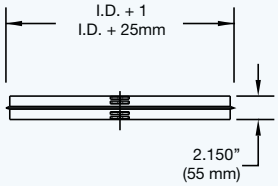


Difference between I.D 2 - I.D. 1	CBGL • CBGL2F • CBGL4F Dim. A	
	in	mm
2	15.000	381
4	19.000	483
6	23.000	585
8	27.000	687
10	31.000	789

FITTINGS

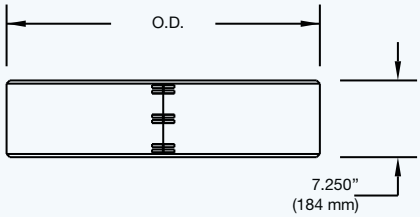
ASSEMBLY BAND • AB

Used to assemble the inner walls of two components. Ensures sealing and rigidity of the system. To be used with a Low (LTS) or a High Temperature Sealant (HTS) (see assembly details).
Includes:
2 Hexagonal screws
2 Square nuts



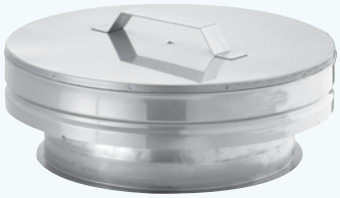
FINISHING BAND • FB

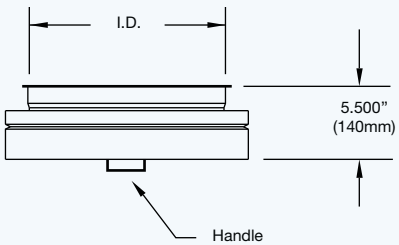
Used to assemble the outer walls of two components. Ensures sealing and rigidity of double wall systems. To be used with an Exterior Sealant (ES) on outside exposed parts.
Includes:
3 Hexagonal screws
3 Square nut
1 Insulation strip for CBGL2F systems



TEE CAP • TC

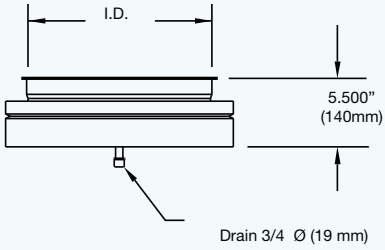
Used to block one of the openings of horizontal or vertical tee. Removable, it facilitates access for inspection and maintenance of the chimney.
Includes:
1 Assembly band (AB)
1 Finishing band (AB)





DRAIN-TEE CAP • DC

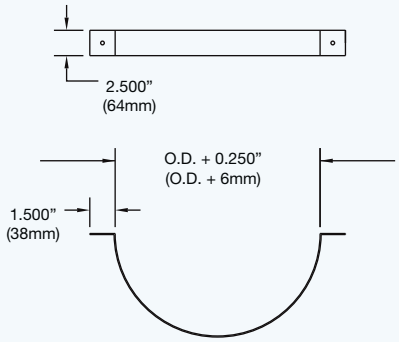
Used to cover one of the vertical openings of tee. For collection of rainwater or condensation water. Removable, it facilitates access for inspection and maintenance of the chimney. To be connected to a drain of 3/4ø (19mm) - NPT.
Includes:
1 Assembly band (AB)
1 Finishing band (FB)



SUPPORTS

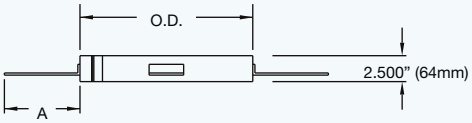
HANGER BRACKET • HB

Used to support the flue in horizontal runs. To be installed by means of 3/8”ø (19mm) threaded rods (not included). Generally installed every 5’-0” (1525mm).



ROOF SUPPORT • RS

Used to support and guide the portion of the chimney which extends to the roof. It is attached to the roof curb by means of four (4) angles. It keeps a minimum distance between the chimney and combustible materials at the roof.



CBGL • CBGL2F		CBGL4F			
I.D.		I.D.		A	
in	mm	in	mm	in	mm
6” to 14”	152 to 356	6” to 10”	152 to 254	5.250	133
16” to 22”	406 to 559	12” to 18”	305 to 457	7.250	184
24” to 32”	610 to 813	20” to 28”	508 to 711	9.250	235
34” to 42”	965 to 1067	30” to 38”	792 to 965	11.250	286
44” to 48”	1118 to 1219	40” to 48”	1016 to 1219	13.250	337

SUPPORTS

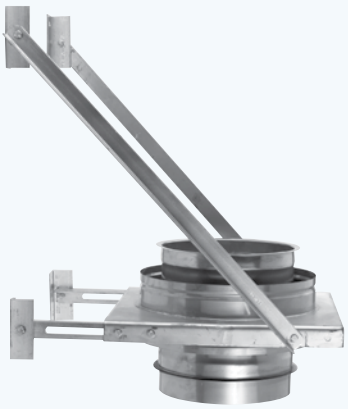
WALL SUPPORT • WS

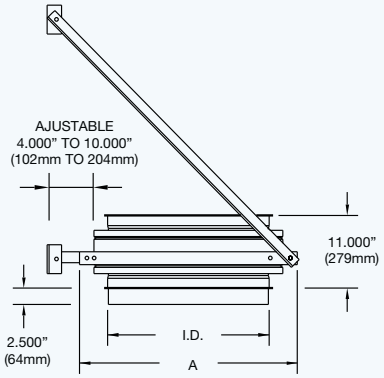
Used to support the chimney in vertical runs. It keeps the chimney at an adjustable distance between 4” (102mm) and 10” (254mm) from the wall. The oblique braces may be attached to the wall either above or below the supporting surface.

Includes:

1 Assembly band (AB)
1 Finishing band (FB)
2 Adjustable angles
2 Braces
4 Wall brackets

K = Same as pipe length





CBGL • CBGL2F			
I.D.		A	
in	mm	in	mm
6	152	14.000	356
8	203	16.000	406
10	254	18.000	457
12	305	20.000	508
14	356	22.000	559
16	406	24.000	610
18	457	26.000	660
20	508	28.000	711
22	559	30.000	762
24	610	32.000	813
26	660	34.000	864
28	711	36.000	914
30	762	38.000	965
32	813	40.000	1016
34	864	42.000	1067
36	914	44.000	1118
38	965	46.000	1168
40	1016	48.000	1219
42	1067	50.000	1270
44	1118	52.000	1321
46	1168	54.000	1372
48	1219	56.000	1422

CBGL4F			
I.D.		A	
in	mm	in	mm
6	152	18.000	457
8	203	20.000	508
10	254	22.000	559
12	305	24.000	610
14	356	26.000	660
16	406	28.000	711
18	457	30.000	762
20	508	32.000	813
22	559	34.000	864
24	610	36.000	914
26	660	38.000	965
28	711	40.000	1016
30	762	42.000	1067
32	813	44.000	1118
34	864	46.000	1168
36	914	48.000	1219
38	965	50.000	1270
40	1016	52.000	1321
42	1067	54.000	1372
44	1118	56.000	1422
46	1168	58.000	1473
48	1219	60.000	1524

SUPPORTS

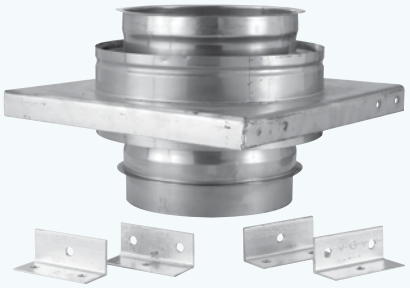
HORIZONTAL SUPPORT • HS

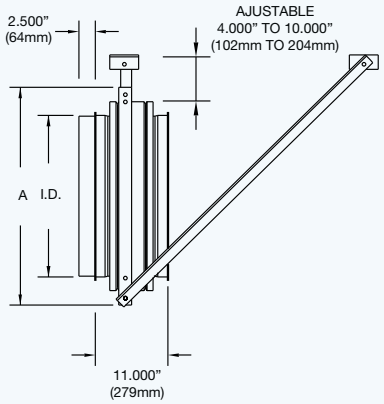
Used to support the flue in horizontal runs. It keeps the flue at an adjustable distance from the ceiling. The oblique braces (not included) may be attached to the ceiling either ahead of or behind the supporting surface.

Includes:

1 Assembly band (AB)
1 Finishing band (FB)
4 Wall brackets

K = Same as pipe length





CBGL • CBGL2F			
I.D.		A	
in	mm	in	mm
6	152	14.000	356
8	203	16.000	406
10	254	18.000	457
12	305	20.000	508
14	356	22.000	559
16	406	24.000	610
18	457	26.000	660
20	508	28.000	711
22	559	30.000	762
24	610	32.000	813
26	660	34.000	864
28	711	36.000	914
30	762	38.000	965
32	813	40.000	1016
34	864	42.000	1067
36	914	44.000	1118
38	965	46.000	1168
40	1016	48.000	1219
42	1067	50.000	1270
44	1118	52.000	1321
46	1168	54.000	1372
48	1219	56.000	1422

CBGL4F			
I.D.		A	
in	mm	in	mm
6	152	18.000	457
8	203	20.000	508
10	254	22.000	559
12	305	24.000	610
14	356	26.000	660
16	406	28.000	711
18	457	30.000	762
20	508	32.000	813
22	559	34.000	864
24	610	36.000	914
26	660	38.000	965
28	711	40.000	1016
30	762	42.000	1067
32	813	44.000	1118
34	864	46.000	1168
36	914	48.000	1219
38	965	50.000	1270
40	1016	52.000	1321
42	1067	54.000	1372
44	1118	56.000	1422
46	1168	58.000	1473
48	1219	60.000	1524

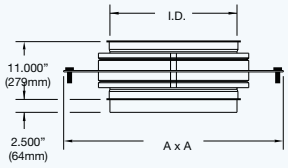
SUPPORT AND GUIDES

ANCHOR PLATE • AP

Used to support the chimney in vertical runs. It is attached to the floor by means of anchors (not included). It is designed to be supported on four (4) sides. Structural angles may be used to support sides that are unsupported.

Includes:
1 Assembly band (AB)
1 Finishing band (FB)

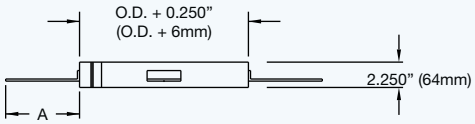
K = Same as pipe length



CBGL • CBGL2F				CBGL4F			
I.D.		A		I.D.		A	
in	mm	in	mm	in	mm	in	mm
6	152	22.000	559	6	152	26.000	660
8	203	24.000	610	8	203	28.000	711
10	254	26.000	660	10	254	30.000	764
12	305	28.000	711	12	305	32.000	813
14	356	30.000	762	14	356	34.000	864
16	406	32.000	813	16	406	36.000	914
18	457	34.000	864	18	457	38.000	965
20	508	36.000	914	20	508	40.000	1016
22	559	38.000	965	22	559	42.000	1068
24	610	40.000	1016	24	610	44.000	1118
26	660	42.000	1068	26	660	46.000	1168
28	711	44.000	1118	28	711	48.000	1219
30	762	46.000	1168	30	762	50.000	1270
32	813	48.000	1219	32	813	52.000	1321
34	864	50.000	1270	34	864	54.000	1372
36	914	52.000	1321	36	914	56.000	1422
38	965	54.000	1372	38	965	58.000	1473
40	1016	56.000	1422	40	1016	60.000	1524
42	1067	58.000	1473	42	1067	62.000	1575
44	1118	60.000	1524	44	1118	64.000	1626
46	1168	62.000	1575	46	1168	66.000	1676
48	1219	64.000	1626	48	1219	68.000	1727

FLOOR GUIDE • FG

Used as a guide at floor penetrations. It is attached to the floor by means of four (4) angles. It keeps a minimum distance between the chimney and combustible floor materials.



CBGL • CBGL2F		CBGL4F		A	
I.D.		I.D.			
in	mm	in	mm	in	mm
6" to 14"	152 to 356	6" to 10"	152 to 254	5.250	133
16" to 22"	406 to 559	12" to 18"	305 to 457	7.250	184
24" to 32"	610 to 813	20" to 28"	508 to 711	9.250	235
34" to 42"	965 to 1067	30" to 38"	792 to 965	11.250	286
44" to 48"	1118 to 1219	40" to 48"	1016 to 1219	13.250	337

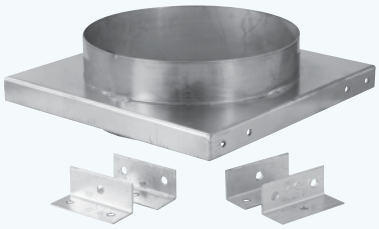
GUIDES

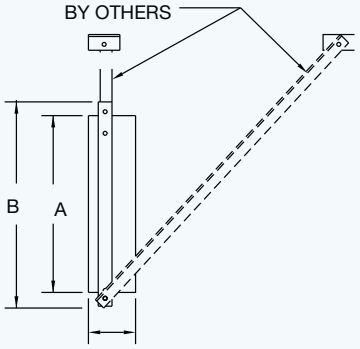
WALL GUIDE • WG

Used as a guide and to allow for expansion of the flue or chimney. It may be used either horizontally or vertically. The oblique braces (not included) may be attached above or below the guide plate.

Includes:

4 Wall brackets





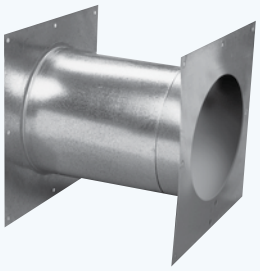
CBGL ● CBGL2F					
I.D.		A		B	
in	mm	in	mm	in	mm
6	152	10.250	260	14.000	356
8	203	12.250	311	16.000	406
10	254	14.250	362	18.000	457
12	305	16.250	413	20.000	508
14	356	18.250	464	22.000	559
16	406	20.250	514	24.000	610
18	457	22.250	565	26.000	660
20	508	24.250	616	28.000	711
22	559	26.250	667	30.000	762
24	610	28.250	718	32.000	813
26	660	30.250	768	34.000	864
28	711	32.250	819	36.000	914
30	762	34.250	870	38.000	965
32	813	36.250	921	40.000	1016
34	864	38.250	972	42.000	1068
36	914	40.250	1022	44.000	1118
38	965	42.250	1073	46.000	1168
40	1016	44.250	1124	48.000	1219
42	1067	46.250	1175	50.000	1270
44	1118	48.250	1226	52.000	1321
46	1168	50.250	1276	54.000	1372
48	1219	52.250	1327	56.000	1422

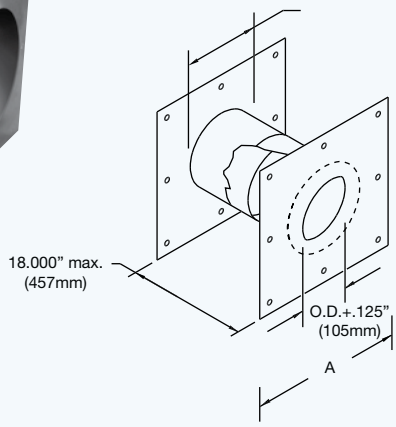
CBGL4F					
I.D.		A		B	
in	mm	in	mm	in	mm
6	152	14.250	362	18.000	457
8	203	16.250	413	20.000	508
10	254	18.250	464	22.000	559
12	305	20.250	514	24.000	610
14	356	22.250	565	26.000	660
16	406	24.250	616	28.000	711
18	457	26.250	667	30.000	762
20	508	28.250	718	32.000	813
22	559	30.250	768	34.000	864
24	610	32.250	819	36.000	914
26	660	34.250	870	38.000	965
28	711	36.250	921	40.000	1016
30	762	38.250	972	42.000	1068
32	813	40.250	1022	44.000	1118
34	364	42.250	1073	46.000	1168
36	914	44.250	1124	48.000	1219
38	965	46.250	1175	50.000	1270
40	1016	48.250	1225	52.000	1321
42	1067	50.250	1276	54.000	1372
44	1118	52.250	1327	56.000	1422
46	1168	54.250	1378	58.000	1473
48	1219	56.250	1429	60.000	1524

FIRESTOPS AND GUIDES

WALL FIRESTOP • WFS

Used to keep a minimum clearance from combustible materials where the flue passes through a wall.

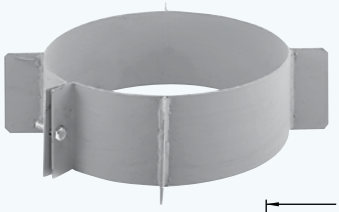


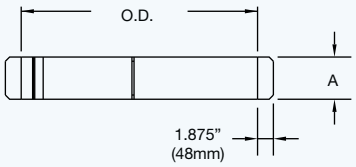


CBG, CBGL, CBGL2F et CBGL4F:
A = O.D + 2*Clearance + 8
B = O.D + *Clearance

GUIDING SPACER • GS

Used to guide the flue or the chimney against the inner wall of the sleeves it passes through. It holds the chimney at a distance of 2" (51mm) from the wall firestop (WFS), insulated wall firestop (IFS) or an insulated sleeve (IS).



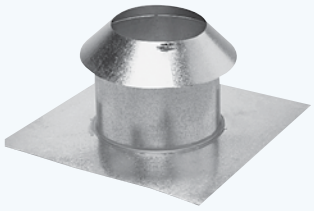


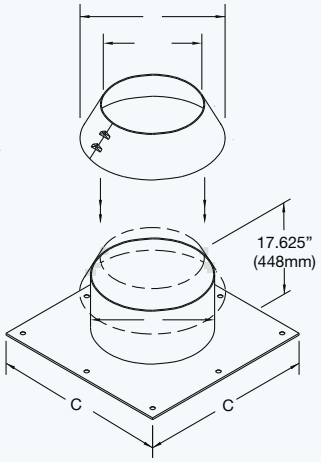
CBGL • CBGL2F I.D.		CBGL4F I.D.		A	
in	mm	in	mm	in	mm
6" to 16"	152 to 406	10" to 20"	254 to 508	4.000	102
18" to 36"	457 to 914	22" to 40"	559 to 1016	6.000	152
38" to 48"	965 to 1219	42" to 52"	1067 to 1321	8.000	203

RADIANT FIRESTOP • RFS

Used to protect combustible materials where a chimney passes through an attic. It ensures a minimum distance from combustible materials.

Includes:
1 Protecting collar

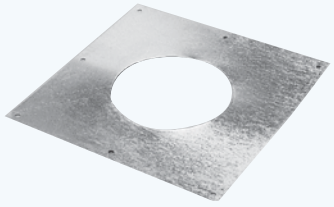


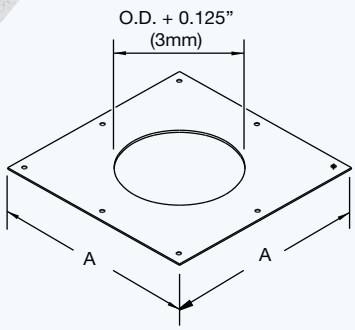


CBG, CBGL, CBGL2F et CBGL4F:
A = O.D + 2*Clearance + 4
B = O.D + 2*Clearance
C = O.D + 2*Clearance + 12

FIRESTOP • FS

Used to keep space between any combustible material of a wall, floor or roof, where a flue or chimmey penetrates.





CBG, CBGL, CBGL2F et CBGL4F:
A = O.D + 2*Clearance + 8

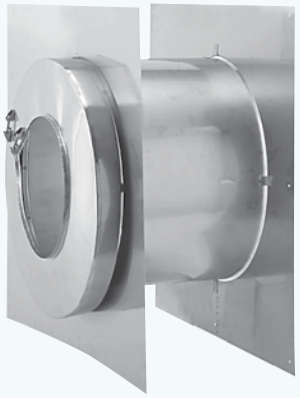
FIRESTOPS

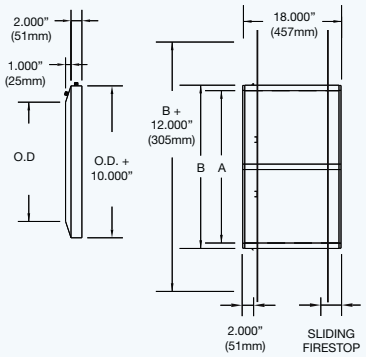
INSULATED WALL FIRESTOP • IFS

Used to protect combustible materials where a flue or chimney passes through a wall. It ensures a minimum space of 2” (51mm) from combustible materials, in addition to reducing excessive heat by means of its double wall and 2” (51mm) high temperature insulation.

Includes:

1 Finishing collar
1 Firestop





CBGL ● CBGL2F					
I.D.		A		B	
in	mm	in	mm	in	mm
6	152	14.000	356	18.000	457
8	203	16.000	406	20.000	508
10	254	18.000	457	22.000	559
12	305	20.000	508	24.000	610
14	356	22.000	559	26.000	660
16	406	24.000	610	28.000	711
18	457	26.000	660	30.000	762
20	508	28.000	711	32.000	813
22	559	30.000	762	34.000	864
24	610	32.000	813	36.000	914
26	660	34.000	864	38.000	965
28	711	36.000	914	40.000	1016
30	762	38.000	965	42.000	1067
32	813	40.000	1016	44.000	1118
34	864	42.000	1067	46.000	1168
36	914	44.000	1118	48.000	1219
38	965	46.000	1168	50.000	1270
40	1016	48.000	1219	52.000	1321
42	1067	50.000	1270	54.000	1372
44	1118	52.000	1321	56.000	1422
46	1168	54.000	1372	58.000	1473
48	1219	56.000	1422	60.000	1525

CBGL4F					
I.D.		A		B	
in	mm	in	mm	in	mm
6	152	18.000	457	22.000	559
8	203	20.000	508	24.000	610
10	254	22.000	559	26.000	660
12	305	24.000	610	28.000	711
14	356	26.000	660	30.000	762
16	406	28.000	711	32.000	813
18	457	30.000	762	34.000	864
20	508	32.000	813	36.000	914
22	559	34.000	864	38.000	965
24	610	36.000	914	40.000	1016
26	660	38.000	965	42.000	1067
28	711	40.000	1016	44.000	1118
30	762	42.000	1067	46.000	1168
32	813	44.000	1118	48.000	1219
34	864	46.000	1168	50.000	1270
36	914	48.000	1219	52.000	1321
38	965	50.000	1270	54.000	1372
40	1016	52.000	1321	56.000	1422
42	1067	54.000	1372	58.000	1473
44	1118	56.000	1422	60.000	1525
46	1168	58.000	1473	62.000	1575
48	1219	60.000	1525	64.000	1626

FIRESTOPS

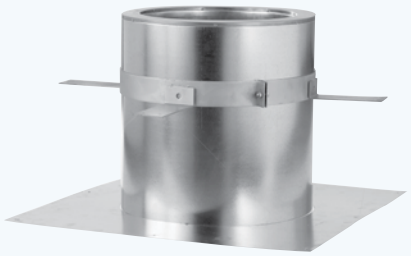
INSULATED SLEEVE • IS

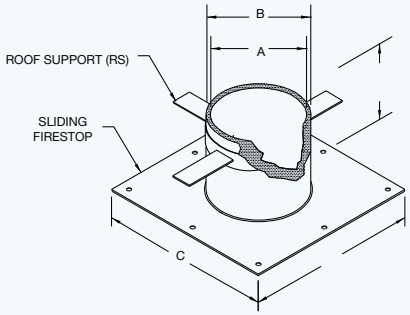
Used to protect combustible materials where a flue or chimney passes through a wall or floor. It ensures a minimum space of 2” (51mm) from combustible materials, in addition to reducing excessive heat by means of its double wall and 2” (51mm) high temperature insulation.

Includes:

1 Firestops

1 Roof Support





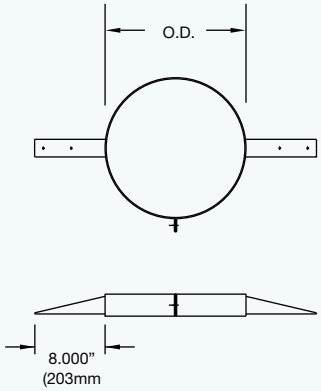
CBGL • CBGL2F							
I.D.		A		B		C	
in	mm	in	mm	in	mm	in	mm
6	152	14.000	356	18.000	457	30.000	762
8	203	16.000	406	20.000	508	32.000	813
10	254	18.000	457	22.000	559	34.000	864
12	305	20.000	508	24.000	610	36.000	914
14	356	22.000	559	26.000	660	38.000	965
16	406	24.000	610	28.000	711	40.000	1016
18	457	26.000	660	30.000	762	42.000	1067
20	508	28.000	711	32.000	813	44.000	1118
22	559	30.000	762	34.000	864	46.000	1168
24	610	32.000	813	36.000	914	48.000	1219
26	660	34.000	894	38.000	965	50.000	1270
28	711	36.000	914	40.000	1016	52.000	1321
30	762	38.000	965	42.000	1067	54.000	1372
32	813	40.000	1016	44.000	1118	56.000	1422
34	864	42.000	1067	46.000	1168	58.000	1473
36	914	44.000	1118	48.000	1219	60.000	1525
38	965	46.000	1168	50.000	1270	62.000	1575
40	1016	48.000	1219	52.000	1321	64.000	1626
42	1067	50.000	1270	54.000	1372	66.000	1676
44	1118	52.000	1321	56.000	1422	68.000	1727
46	1168	54.000	1372	58.000	1473	70.000	1778
48	1219	56.000	1422	60.000	1525	72.000	1829

CBGL4F							
I.D.		A		B		C	
in	mm	in	mm	in	mm	in	mm
6	152	18.000	457	22.000	559	34.000	864
8	203	20.000	508	24.000	610	36.000	914
10	254	22.000	559	26.000	660	38.000	965
12	305	24.000	610	28.000	711	40.000	1016
14	356	26.000	660	30.000	762	42.000	1068
16	406	28.000	711	32.000	813	44.000	1118
18	457	30.000	762	34.000	864	46.000	1168
20	508	32.000	813	36.000	914	48.000	1219
22	559	34.000	894	38.000	965	50.000	1270
24	610	36.000	914	40.000	1016	52.000	1321
26	660	38.000	965	42.000	1068	54.000	1372
28	711	40.000	1016	44.000	1118	56.000	1422
30	762	42.000	1068	46.000	1168	58.000	1473
32	813	44.000	1118	48.000	1219	60.000	1524
34	864	46.000	1168	50.000	1270	62.000	1575
36	914	48.000	1219	52.000	1321	64.000	1626
38	965	50.000	1270	54.000	1372	66.000	1676
40	1016	52.000	1321	56.000	1422	68.000	1727
42	1067	54.000	1372	58.000	1473	70.000	1778
44	1118	56.000	1422	60.000	1524	72.000	1829
46	1168	58.000	1473	62.000	1575	74.000	1880
48	1219	60.000	1524	64.000	1626	76.000	1930

BANDS

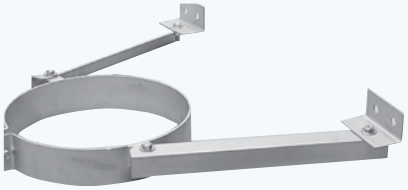
SUSPENSION BAND • SB

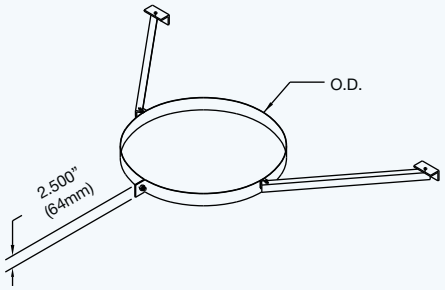
Used to stabilize and support a flue or chimney in vertical runs. It avoids the transfer of the flue weight to the appliance. To be used with threaded rods (not included)



WALL BAND • WB

Used to stabilize the chimney along a vertical wall. The maximum recommended spacing between wall bands is 10'-0" (3048mm).
Includes:
1 Wall brackets
1 Stabilizing angles

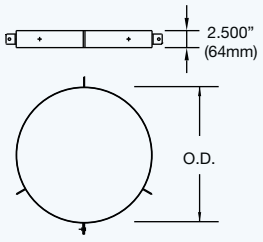




BAND, COLLARS AND FLASHING

GUY WIRE BAND • GWB

Used to stabilize a chimney laterally where it extends more than 10'-0" (3048mm) above the roof or for locations exposed to strong winds. It is attached to the chimney and is designed to receive 3 guy wires 120˚ apart (not included). It may be manufactured to receive 4 guy wires 90˚ apart.

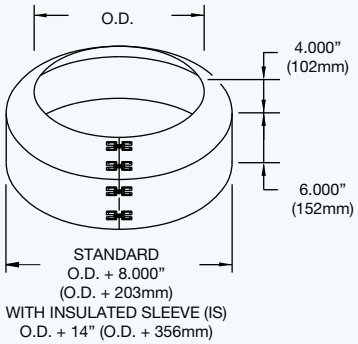


VENTILATED COLLAR • VC • SVC

Used to seal the space between the chimney and flashing. The ventilated collar must be sealed to the chimney with appropriate sealant. It is supplied with ventilated flashing.

Includes:

1 Socket head cap screws

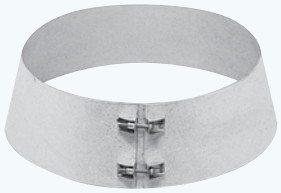


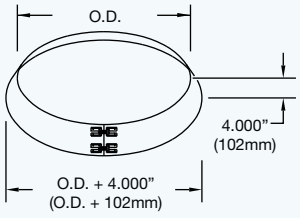
STORM COLLAR • SC

Used to seal the space between the chimney and flashing. The storm collar must be sealed to the chimney with appropriate sealant. It is supplied with flashing for flat roofs of adjustable flashing.

Includes:

1 Socket head cap screws



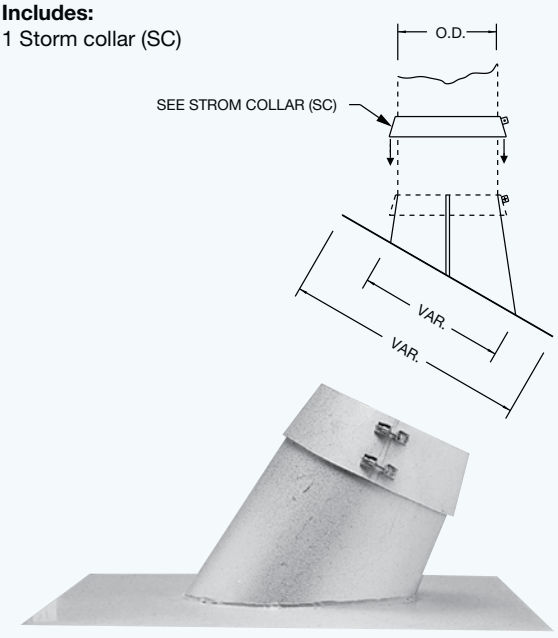


ADJUSTABLE FLASHING • AF

Used to seal the space between the chimney and the roof. Specify the roof slope when ordering.

Includes:

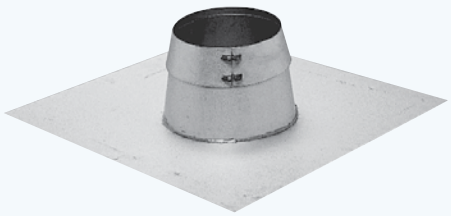
1 Storm collar (SC)

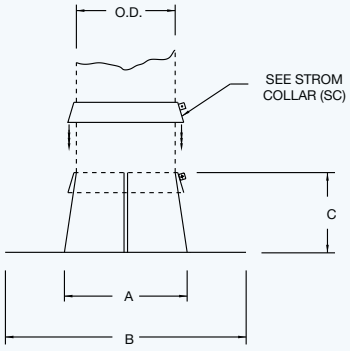


FLASHINGS

FLAT FLASHING • F

Includes:





CBGL ● CBGL2F					
I.D.		A		C	
in	mm	in	mm	in	mm
6	152	13.000	300	12.000	305
8	203	15.000	381	12.000	305
10	254	17.000	432	12.000	305
12	305	19.000	483	12.000	305
14	356	21.000	533	12.000	305
16	457	23.000	584	12.000	305
18	457	25.000	635	16.000	406
20	508	27.000	686	16.000	406
22	559	29.000	737	16.000	406
24	610	31.000	787	16.000	406
26	660	33.000	838	16.000	406
28	711	35.000	889	16.000	406
30	762	37.000	940	16.000	406
32	813	39.000	991	16.000	406
34	864	41.000	1041	16.000	406
36	914	43.000	1092	16.000	406
38	965	45.000	1143	16.000	406
40	1016	47.000	1194	16.000	406
42	1067	49.000	1245	16.000	406
44	1118	51.000	1295	16.000	406
46	1168	53.000	1346	16.000	406
48	1219	55.000	1397	16.000	406

CBGL4F					
I.D.		A		C	
in	mm	in	mm	in	mm
6	152	18.000	457	12.000	305
8	203	20.000	508	12.000	305
10	254	22.000	559	12.000	305
12	305	24.000	610	12.000	305
14	356	26.000	660	12.000	305
16	406	28.000	711	12.000	305
18	457	30.000	762	16.000	406
20	508	32.000	813	16.000	406
22	559	34.000	864	16.000	406
24	610	36.000	914	16.000	406
26	660	38.000	965	16.000	406
28	711	40.000	1016	16.000	406
30	762	42.000	1067	16.000	406
32	813	44.000	1118	16.000	406
34	864	46.000	1168	16.000	406
36	914	48.000	1219	16.000	406
38	965	50,.000	1270	16.000	406
40	1016	52.000	1321	16.000	406
42	1067	54.000	1370	16.000	406
44	1118	56.000	1422	16.000	406
46	1168	58.000	1473	16.000	406
48	1219	60.000	1524	16.000	406

CBG, CBGL, CBGL2F, CBGL4F:
B = A +16

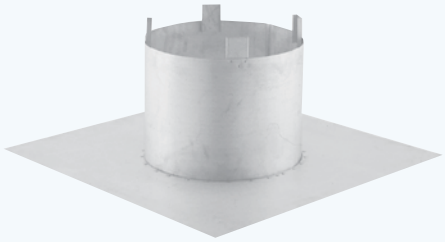
FLASHINGS

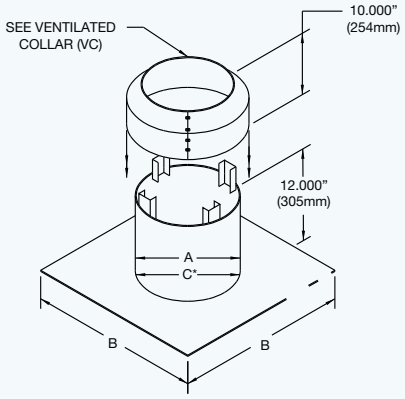
VENTILATED FLASHING • VF

Used to seal and ventilate the space between the chimney and the roof. It reduces the temperature around the roof opening and it prevents excessive accumulation of heat near combustible materials.

Includes:

1 Ventilated collar (VC)





CBGL ● CBGL2F					
I.D.		A		C	
in	mm	in	mm	in	mm
6	152	14.000	356	20.000	508
8	203	16.000	406	22.000	559
10	254	18.000	457	24.000	610
12	305	20.000	508	26.000	660
14	356	22.000	559	28.000	711
16	457	24.000	610	30.000	762
18	457	26.000	660	32.000	813
20	508	28.000	711	34.000	864
22	559	30.000	762	36.000	914
24	610	32.000	813	38.000	964
26	660	34.000	864	40.000	1016
28	711	36.000	914	42.000	1068
30	762	38.000	964	44.000	1118
32	813	40.000	1016	46.000	1168
34	864	42.000	1067	48.000	1219
36	914	44.000	1118	50.000	1270
38	965	46.000	1168	52.000	1321
40	1016	48.000	1219	54.000	1372
42	1067	50.000	1270	56.000	1422
44	1118	52.000	1321	58.000	1473
46	1168	54.000	1372	60.000	1525
48	1219	56.000	1422	62.000	1575

CBGL4F					
I.D.		A		C	
in	mm	in	mm	in	mm
6	152	18.000	457	24.000	610
8	203	20.000	508	26.000	660
10	254	22.000	559	28.000	711
12	305	24.000	610	30.000	762
14	356	26.000	660	32.000	813
16	406	28.000	711	34.000	864
18	457	30.000	762	36.000	914
20	508	32.000	813	38.000	965
22	559	34.000	864	40.000	1016
24	610	36.000	914	42.000	1068
26	660	38.000	965	44.000	1118
28	711	40.000	1016	46.000	1168
30	762	42.000	1067	48.000	1219
32	813	44.000	1118	50.000	1270
34	864	46.000	1168	52.000	1321
36	914	48.000	1219	54.000	1370
38	965	50,.000	1270	56.000	1422
40	1016	52.000	1321	58.000	1473
42	1067	54.000	1370	60.000	1524
44	1118	56.000	1422	62.000	1575
46	1168	58.000	1473	64.000	1626
48	1219	60.000	1524	66.000	1676

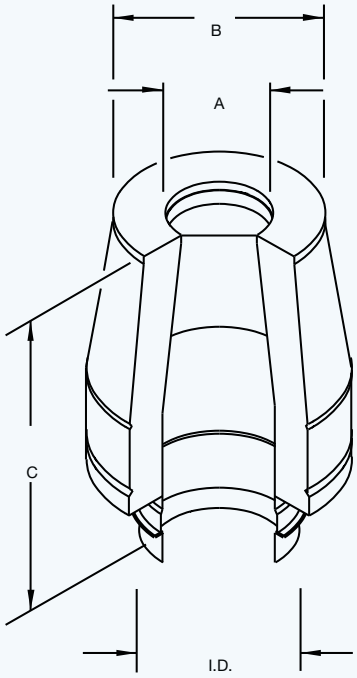
*With insulated sleeve(s)

TERMINATIONS

EXHAUST CONE • EC

Installed at the top of the chimney. It improves the draft and increases the speed of exhaust gases by 50%. Installation of a drain-tee cap (DC) or a drain section (DS) at the base of the chimney is required for use of an exhaust cone.

K = 1.25



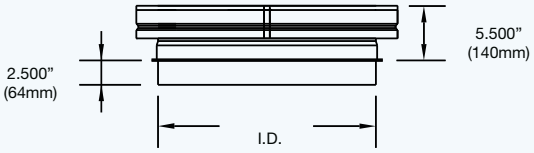
CBGL • CBGL2F							
I.D.		A		B		C	
in	mm	in	mm	in	mm	in	mm
6	152	5.000	127	9.000	229	17.750	451
8	203	7.000	178	11.000	279	17.750	451
10	254	8.000	203	12.000	305	17.750	451
12	305	10.000	254	14.000	356	17.750	451
14	356	12.000	305	16.000	406	23.500	497
16	406	14.000	356	18.000	457	23.500	497
18	457	16.000	406	20.000	508	23.500	497
20	508	16.000	406	20.000	508	23.500	497
22	559	18.000	457	22.000	559	23.500	497
24	610	20.000	508	24.000	610	23.500	497
26	660	22.000	559	26.000	660	29.500	749
28	711	24.000	610	28.000	711	29.500	749
30	762	24.000	610	28.000	711	29.500	749
32	813	26.000	660	30.000	762	35.500	902
34	864	28.000	711	32.000	813	35.500	902
36	914	30.000	762	34.000	864	35.500	902
38	965	30.000	762	34.000	864	41.500	1054
40	1016	32.000	813	36.000	914	41.500	1054
42	1067	34.000	864	38.000	965	41.500	1054
44	1118	36.000	914	40.000	1016	41.500	1054
46	1168	38.000	965	42.000	1067	41.500	1054
48	1219	40.000	1016	44.000	1118	41.500	1054

CBGL4F							
I.D.		A		B		C	
in	mm	in	mm	in	mm	in	mm
6	152	5.000	127	13.000	330	17.750	451
8	203	7.000	178	15.000	381	17.750	451
10	254	8.000	203	16.000	406	17.750	451
12	305	10.000	254	18.000	457	17.750	451
14	356	12.000	305	20.000	508	23.500	497
16	406	14.000	356	22.000	559	23.500	497
18	457	16.000	406	24.000	610	23.500	497
20	508	16.000	406	24.000	610	23.500	497
22	559	18.000	457	26.000	660	23.500	497
24	610	20.000	508	26.000	711	23.500	497
26	660	22.000	559	30.000	762	29.500	749
28	711	24.000	610	32.000	813	29.500	749
30	762	24.000	610	32.000	813	29.500	749
32	813	26.000	660	34.000	864	35.500	902
34	864	28.000	711	36.000	914	35.500	902
36	914	30.000	762	38.000	965	35.500	902
38	965	30.000	762	38.000	965	41.500	1054
40	1016	32.000	813	40.000	1016	41.500	1054
42	1067	34.000	864	42.000	1067	41.500	1054
44	1118	36.000	914	44.000	1118	41.500	1054
46	1168	38.000	965	46.000	1168	41.500	1054
48	1219	40.000	1016	48.000	1219	41.500	1054

TERMINATIONS AND ADAPTER

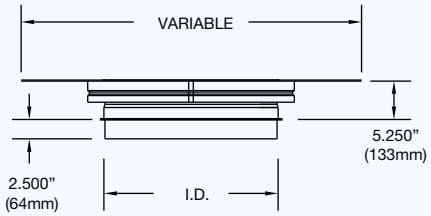
CLOSURE SECTION • CS

Installed at the top of the chimney. It protects the chimney against water infiltration in the insulation between the inner and outer wall of the chimney. Installation of a drain-tee cap (DC) or a drain section (DS) at the base of the chimney is required for use of a closure section.



FAN ADAPTER • FA

Installed at the chimney termination. Used to connect the chimney to an induced draft fan.



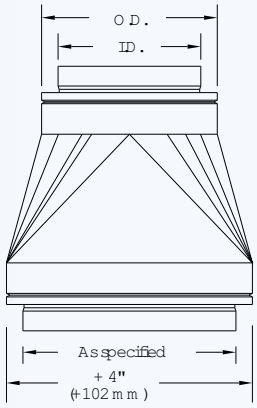
TRANSITION ADAPTER (TA)

Used to connect the grease duct or conduit to the hood outlet. This rectangular to round or round to round transition may be manufactured in accordance with the sizes specified.

Includes:

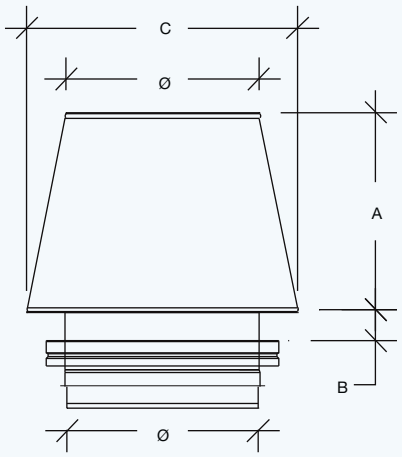
1 Assembly band (AB)

1 Finishing band (FB)

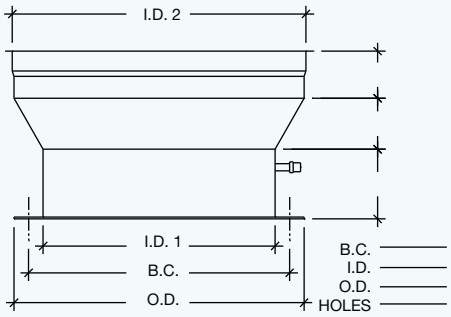


SPECIAL PARTS

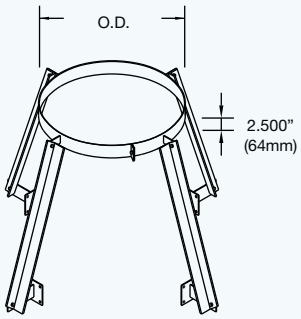
Several special parts are available upon request.
See some examples below.



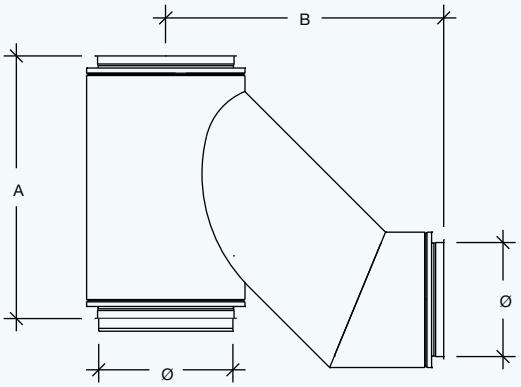
Finishing Cone



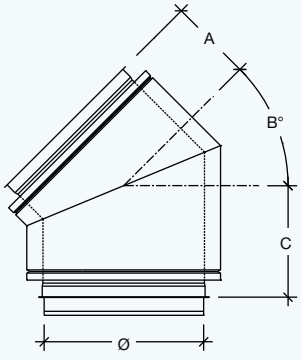
Special Starting Adapter



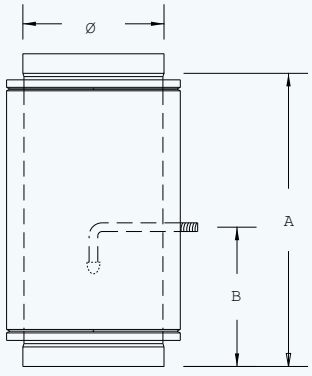
Roof band



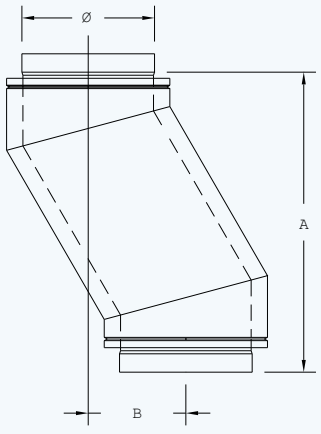
Combination Tee and Elbow



Special Elbow



Nozzle Section
with Sprinkler



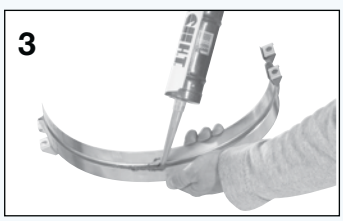
Offset one piece

INSTALLATION GUIDE

Guide to Component Parts

MATERIALS	CODE	PAGE
JOINTING		
Assembly Band	AB	17
Finishing Band	FB	FB
LENGTH		
12” Length	12L	9
24” Length	24L	9
36” Length	36L	9
48” Length	48L	9
CONNECTION / OFFSET		
5° Elbow	E5	13
15° Elbow	E15	13
30° Elbow	E30	14
45° Elbow	E45	14
90° Elbow	2 x E45	15
90° Short Radius Elbow	E90	15
45° Tee	T45	11
90° Tee	T90	11
Grease Duct Tee	GT90	11
FIRE PROTECTION		
Firestop	FS	20
Insulated Sleeve	IS	22
Insulated Wall Firestop	IFS	21
Radiant Firestop	RFS	21
Wall Firestop	WFS	21
ADJUSTEMENT / EXPANSION		
Adjustable Length	AL	10
Variable Length	VL	10
Increaser	I	16
Reducer	R	16
SIDE STABILITY		
Wall band	WB	22
Guy Wire Band	GWB	23
CONNECTING THE FLUE		
Transition Adapter	TA	10
Nozzle Section	NS	10
Tee Cap	TC	17
Drain Tee Cap	DC	17
SEALING AT ROOF		
Adjustable Flashing	AF	23
Flashing for Flat Roof	F	24
Ventilated Flashing	VF	24
SUPPORT / GUIDE		
Anchor Plate	AP	20
Floor Guide	FG	20
Guiding Spacer	GS	20
Hanger Bracket	HB	18
Horizontal Support	HS	19
Roof Support	RS	18
Suspension Band	SB	22
Wall Guide	WG	19
Wall Support	WS	18
TERMINATIONS		
Fan Adapter	FA	26
Exhaust Cone	EC	25
Closure section	CS	26

PIPE AND FITTING JOINT ASSEMBLY, STEP BY STEP



1. All components have a male and a female end. The orientation is indicated on the labelling of each section with an arrow. The arrow indicates the direction of the flue.
2. Before fitting the large and small ends into one another, a sealant (LTS) is applied on the inside circumference of the larger end.
3. Assemble both sections by sliding one section into the other until the flanges meet. A layer of sealant is applied inside the V-Groove of the Assembly band (AB) prior to it’s installation over the joint.
4. The Assembly Band (AB) is installed and clamped in place with 4 nuts and bolts (supplied).
5. Insert the insulation strip around the inner joint assembly of insulated models CBGL2F.
6. The Finishing Band (FB) is installed by slipping the edges of the band into the outer pipe edges and clamping them with 3 nuts and bolts (supplied).

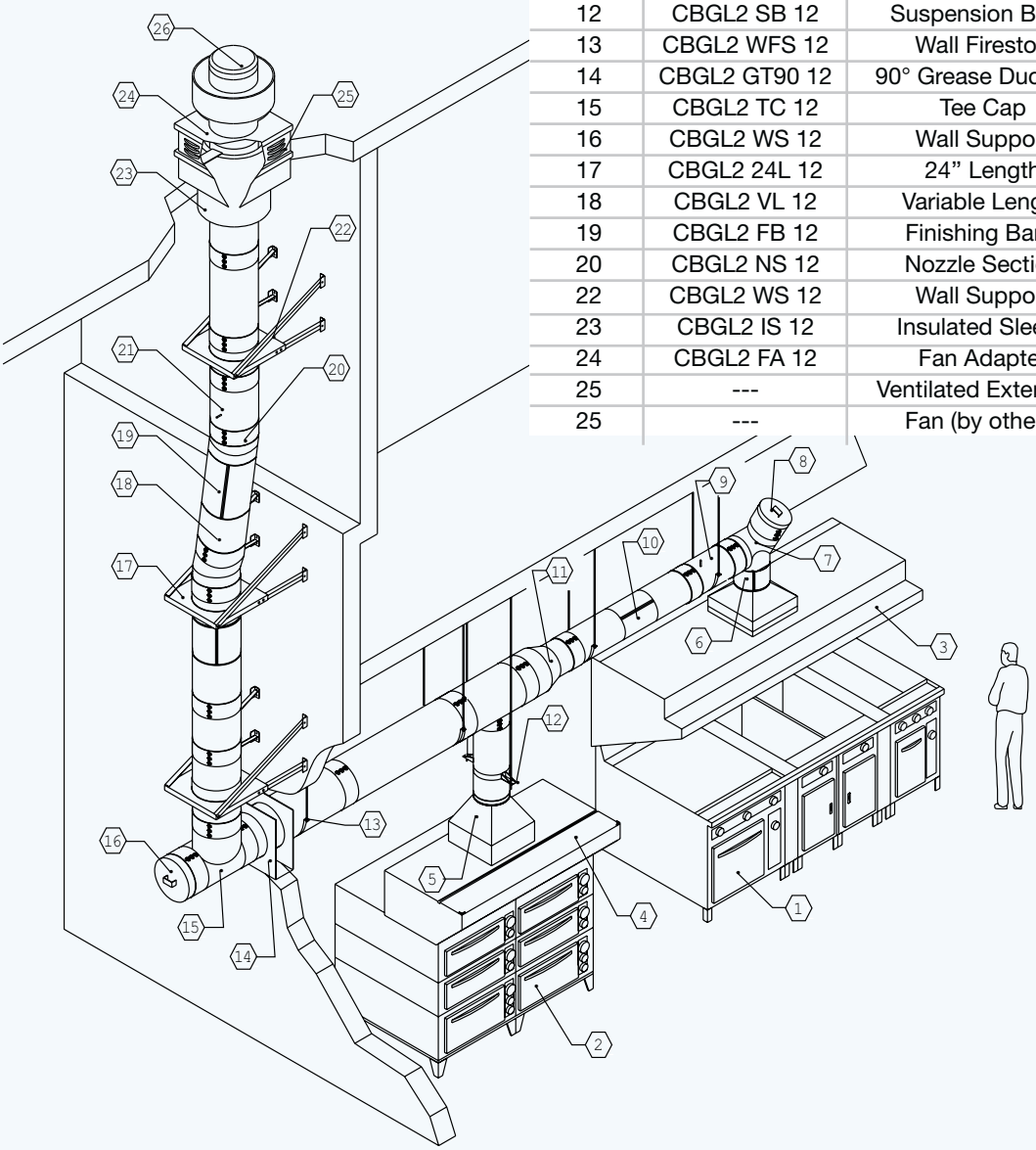
LTS: Low Temperature Sealant. 600˚F maximum flue gas temperature
HTS: High Temperature Sealant. Up to 2000˚F flue gas temperature
ES: Exterior Sealant. Outer sealant weather proof

7. FOR OUTDOOR INSTALLATION AND BAD WEATHER PROTECTION, AN EXTERIOR SEALANT (ES) IS APPLIED AT THE JOINT BETWEEN THE FINISHING BAND (FB) AND THE OUTER WALL OF THE CHIMNEY.

GREASE DUCT SYSTEM

Sample Drawings

No.	part No.	Description	page
1	---	Appliance (By others)	---
2	---	Appliance (by others)	---
3	---	Exhaust Hood	---
4	---	Exhaust Hood	---
5	CBGL2 TA 12	Transition Adapter	36
6	CBGL2 AL 12	Adjustable Lenght	10
7	CBGL2 W90 12	90° Wye	15
8	CBGL2 TC 12	Tee Cap	22
9	CBGL2 NS 12	Nozzle Section	10
10	CBGL2 VL 12	Variable Length	10
11	CBGL2 I 12	Increaser	21
12	CBGL2 SB 12	Suspension Band	31
13	CBGL2 WFS 12	Wall Firestop	29
14	CBGL2 GT90 12	90° Grease Duct Tee	13
15	CBGL2 TC 12	Tee Cap	22
16	CBGL2 WS 12	Wall Support	24
17	CBGL2 24L 12	24” Length	9
18	CBGL2 VL 12	Variable Length	10
19	CBGL2 FB 12	Finishing Band	22
20	CBGL2 NS 12	Nozzle Section	10
22	CBGL2 WS 12	Wall Support	24
23	CBGL2 IS 12	Insulated Sleeve	30
24	CBGL2 FA 12	Fan Adapter	36
25	---	Ventilated Extension	37
25	---	Fan (by others)	---

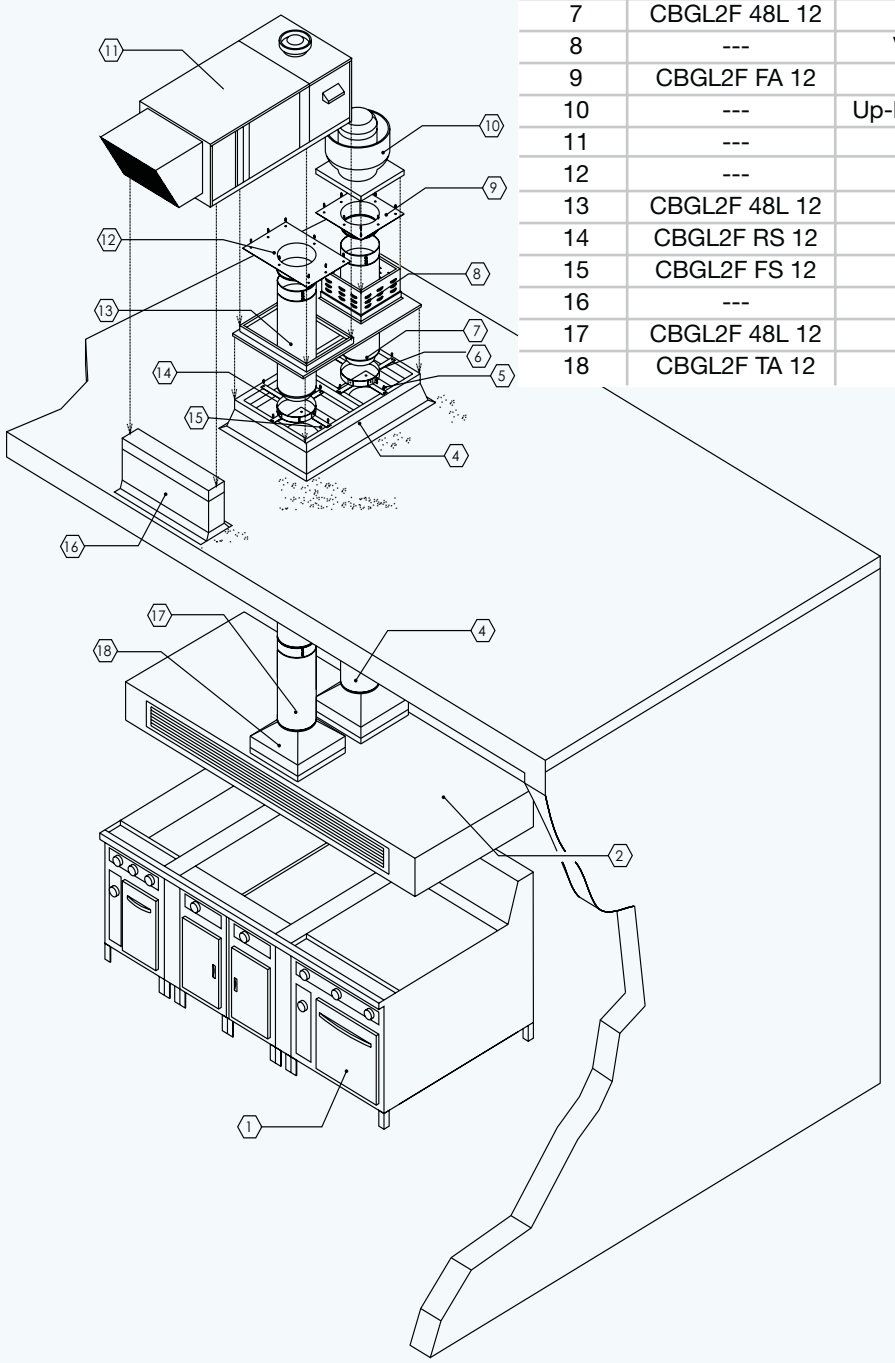


Up-Blast Fan Exhaust System

GREASE DUCT SYSTEM

Sample Drawings

No.	part No.	Description	page
1	---	Appliance (By others)	---
2	---	Exhaust Hood	---
3	CBGL2F WG 12	Wall Guide	27
4	---	Roof Curb	---
5	CBGL2F FS 12	Firestop	29
6	CBGL2F RS 12	Roof Support	23
7	CBGL2F 48L 12	48” Length	10
8	---	Ventilated Curb Extention	---
9	CBGL2F FA 12	Fan Adapter	36
10	---	Up-blast Exhaust Fan (By others)	---
11	---	Make-up Unit (By others)	---
12	---	Supply Fan Adapter	---
13	CBGL2F 48L 12	48” Length	10
14	CBGL2F RS 12	Roof Support	23
15	CBGL2F FS 12	Firestop	29
16	---	System Support	---
17	CBGL2F 48L 12	48” Length	10
18	CBGL2F TA 12	Transition Adapter	36



Make-up Air supply / Exhaust System

1-YEAR STANDARD WARRANTY

Models CBG, CBGL, CBGL2F and CBGL4F

All components of our models CBG, CBGL, CBGL2F and CBGL4F chimney system have been inspected in our workshop in accordance with our quality standards. Cleaver-Brooks warrants the chimney/exhaust system and components against defects in material and workmanship for a period of (1) one year from date of delivery to the purchaser. During this period, any system or component supplied by Cleaver-Brooks failing to perform its intended function of exhausting, without adverse leakage, combustion by-products from engine or heating appliance will be repaired or replaced at the manufacturer option.

This warranty is limited to repair or replacement of any component which has been proven defective by a factory-authorized inspector by Cleaver-Brooks This warranty does not cover any labour cost or freight charge for removal or replacement of the defective product, nor does this warranty cover any system component not furnished by Cleaver-Brooks and installed as part of the system. The warranty on any repaired or replacement component shall be for a duration no longer than the remaining or unexpired term of the original warranty.

This standard warranty is subject to the following conditions:

a) Generally accepted engineering practices have been followed to determine that sizing and material specifications are suitable for the application and environment involved.
b) The undamaged components have been correctly installed in accordance with the installation instructions published by Cleaver-Brooks at the time of shipment.

The standard warranty is extended to a **15-YEAR LIMITED WARRANTY** provided the following conditions are satisfied:

a) The chimney must have been connected to an appliance listed by a testing authority recognized by the federal government. Also, this warranty is void if the appliance was not installed, used and maintained according to the manufacturer instructions.
b) The chimney system must have been designed and sized by the engineering department of Cleaver-Brooks All design and operating parameters provided to Cleaver-Brooks must meet the standards of Cleaver-Brooks and must be accurately representative of the operating conditions.
c) The undamaged components must have been correctly installed, used and maintained in accordance with the instructions published by Cleaver-Brooks at the time of shipment.
d) Air used in combustion must be free from any solvent or refrigerant vapor and from any halogenated compound which might generate acid condensate within the flue or chimney.
e) Cleaver-Brooks has supplied the entire chimney or exhaust system from the appliance outlet to the stack termination.
f) Prior to start-up and thereafter, exposed galvanized and aluminized steel surfaces are at all times protected with a minimum of one base coat primer and one finish coat of heat and corrosion resistant paint.

In no event shall Cleaver-Brooks be liable for any incidental or consequential damages of any kind or for any damage resulting in whole or in part from misuse, improper installation, removal and/or reuse of components or inadequate maintenance of the system or any component part thereof. In no event shall Cleaver-Brooks be liable for any cost of installation, removal and reinstallation. Cleaver-Brooks assumes no liability in case of fire, chimney fire, lightning or act of God. This warranty is in lieu of all other express warranties or guarantees of any kind. All implied warranties, including merchantability and fitness, are limited to the duration of the express warranty contained herein. Cleaver-Brooks neither assumes nor authorizes any other person to assume on its behalf any other liability in connection with products sold. No agent is authorized to make any modification to this warranty or additional warranties, even if in writing, binding Cleaver-Brooks

The purchaser or complainant must send all claims under this warranty in writing to Cleaver-Brooks Customer Service Department.

warranty

Exhaust Solutions
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