

# Brush Solutions...



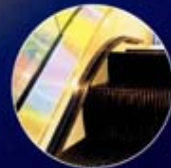
sealing systems



design engineering  
applications



energy conservation



safety

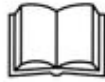


cleaning & finishing



# How to use this Manual

*Presented with the  
designer, specifier  
and installer in mind,  
this manual contains  
technical information  
on the comprehensive  
range of products  
available from  
Kleeneze Sealtech.*



## About this manual

This manual contains technical information on both standard and custom made products where the options and limits of manufacture are described.

The manual is divided into sections by product group and application. Pages are numbered by section for easy referencing.

---



## How to specify

### Standard products

Please specify standard products by using the part numbers and general descriptions shown on the detailed product pages.

### Special products

Please specify custom made products by using the 'How to specify' guides shown on the detailed product pages together with any additional requirements.

---



## Cross-reference

Because the broad product range provides numerous solutions for many applications, the manual contains an easy cross-reference system which enables the specifier to quickly find information on similar products.

Simply refer to the page numbers shown on the symbol.

---



## Technical advice and assistance

Kleeneze Sealtech's nationwide team of technical representatives and in-house Technical Advisory department are able to provide advice and assistance on all aspects of brush technology.

# C O N T E N T S

## Section One

<b>Brushstrip</b>	Introduction .....	4
	Straight Brushstrip .....	6
	Brushstrip in Aluminium Carrier.....	8
<i>Case Study –</i>	Pest Control .....	14
<i>Case Study –</i>	Escalator Safetystrip .....	15
	Brushstrip Coils.....	16
	Brushstrip Cup Shape .....	20
	Brushstrip with Steel Flange .....	21
	Formed Brushstrip in Carrier .....	22
	Special Forming & Trimming.....	23
<b>Rollerbrushes &amp; Punched Knot</b>	Introduction .....	24
	Coiled Strip Rollerbrush.....	26
	Axial & Helical Strip Rollerbrushes .....	28
	Tufted Rollerbrushes .....	30
	Lath & Disc Brushes .....	32
<b>Wire &amp; Abrasive Brushes</b>	Introduction .....	34
	Single Section, Circular & Cup Brushes.....	37
	Shaft Mounted & End Brushes.....	38
	Bevel, Interior, Tube Cleaning Brushes .....	39
<b>Antistatic Brushes</b>	Introduction .....	40
	Statstrip .....	42
	Ostrich Feather Brushes.....	43
<b>Technical Information</b>	Introduction .....	44
	Material Characteristics.....	46

## Section Two

<b>Door &amp; Window Seals</b>	Introduction .....	50
	Seals for Windows .....	54
	Seals for External Doors.....	56
	Seals for Internal Doors .....	58
	Seals for Glass Doors .....	60
	Seals for Prestige Doors .....	62
	Seals for Folding Shutter Doors .....	64
	Seals for Steel Doors .....	65
	Seals for Industrial Sliding Doors .....	66
	Compression Seals & Sealants.....	68

# About Kleeneze Sealtech

## Leading the field

*Kleeneze Sealtech is the world's leading manufacturer of brushstrip products with unrivalled expertise in the applications of brushstrip technology.*

*Founded in 1923 Kleeneze Sealtech has grown steadily to become the market leader. Today we employ over 100 dedicated and experienced staff, supply an extensive range of products, and have a very strong record of profitable trading.*

*As a subsidiary of Kullen GmbH, one of the world's largest manufacturers of industrial brushes and with sister company Record Industrial Brushes, Llandoverly, we are able to offer the full range of products across all of the brush technologies. Our group structure gives us the industrial resources needed to retain our competitive edge and continue to grow.*

## Combining Strengths

*In September 1999 we launched an exciting new partnership with our sister company Record Industrial Brushes. Our national sales forces were combined in order to provide and even better service. For any company in the UK one of our highly experienced engineers is on hand to give on the spot assistance.*

*All sales enquiries are handled through a central Customer Service Department based in our offices in Bristol. By "combining our strengths" customers can enquire and order any group product with one telephone call. So whether it is punched lath brush for moving glass, a twisted interior brush specially formed to seal a shaft-we can supply them.*

## State of the art

*A key factor in our success is technical excellence. This is maintained by investing in the latest technology and through a continual process of research, development and market testing.*

*Our factory is purpose built - most of the range is produced on machines which we have designed and developed ourselves - and our understanding of materials is second to none. This provides enormous operational flexibility enabling us to meet the most demanding specifications and capacity requirements.*

 **Kullen**

 **Kleeneze**  
Sealtech Limited

 **R.I.B.**  
Record Industrial Brushes Ltd.

Kullen Group of Companies



## Design and Development

*Our ability to offer customers a complete custom-built design and manufacturing service makes Kleeneze Sealtech unique. Our design and technical advisory service develops products to meet special needs and helps solve technical problems.*

*With thousands of applications for brush currently in use we offer innovative and practical solutions. And the list of applications keeps growing - from the Arctic to outer space - as new products are created and the existing range is refined.*

## Total quality

*Our quality systems are approved to the highest international standards. To ensure we always meet these exacting standards we operate a multi-point quality control and production system:*

- *quality systems approved to ISO 9002*
- *independently tested by BSRIA and found to be 98% effective as an air seal*
- *approved to Draughtstrip Performance Standard BS: 7386: 1997*
- *issued with a cold smoke test certificate following tests by TRADA.*

*It is also approved by the British and other governments and is cleared for use by the military, public buildings, private and local authority housing and energy conservation groups in the UK.*

## Free advice and support

*Customer service is our forte. Our team of technical representatives and designers are always available to provide advice and assistance on all aspects of brush technology. If it can be done, we can do it.*

We can help you find the solution.  
For free advice call us now on:  
**0117 947 5149**

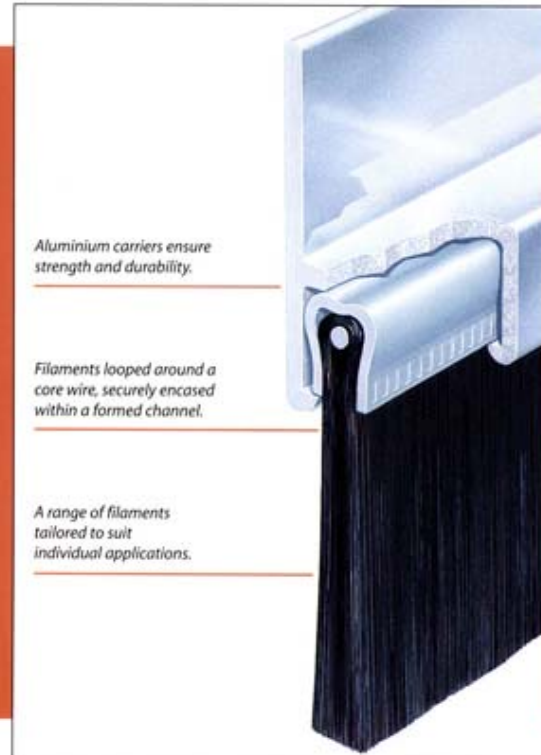


FM 20303

# Brushstrip

*Manufactured on machines designed and developed by us, brushstrip is one of the most adaptable products available. As a seal it can provide a barrier against dust, noise and air movement. In manufacturing, it can clean, polish, texture and finish. In processing, it can apply pressure, guide, transport and protect.*

*The flexibility and independence of the brush filaments enables the product to adapt to irregular contours whilst providing an excellent seal against moving and sliding parts.*



Aluminium carriers ensure strength and durability.

Filaments looped around a core wire, securely encased within a formed channel.

A range of filaments tailored to suit individual applications.

*Brushstrip is constructed by looping filaments around a core wire which is then encased in a formed metal channel, thus ensuring a high degree of filament security. The resultant assembly can be cut, formed and trimmed to any specification which is technically possible.*

*A range of filling materials, including synthetics, natural hair and fibres, abrasives and metallic wires and even mixtures is available to suit all applications.*

*"We specify Kleeneze Sealtech Brushstrip sections in our Sanderhead Machines, which are used mainly to sand/prepare wood contours prior to staining, varnishing or painting. The brushstrip sections give an excellent combination of flexibility and durability which enhance the design features of the Sanderhead Machine."*

**Kemet International Ltd.**

## Straight Brushstrip

**Type 20 Straight brushstrip** is available in a range of standard sizes or manufactured to customer specification. The metal backing strip, which determines the brush density and maximum fill type, is manufactured in eight nominal sizes suitable for mounting into extruded carriers, formed or machined holders and mouldings. In addition to the materials shown in the table below, brushstrip can also be filled in hair, bristle, fibre and or mixed materials, selected to suit the application. Refer to page 46 for material properties.

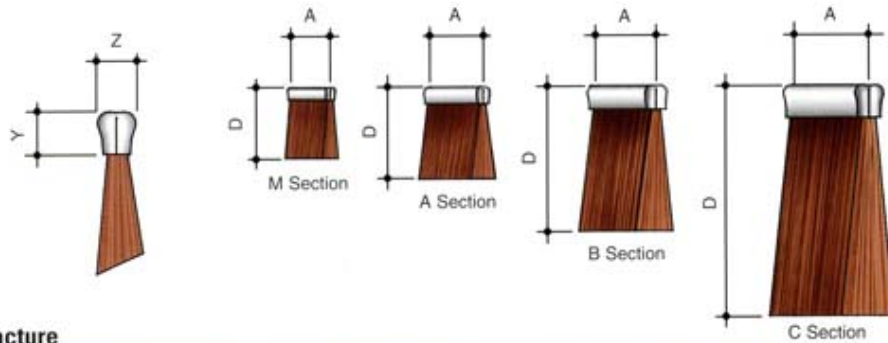
### Standard range

Available in 3000mm lengths, this selection, as shown in the table below, can also be supplied cut to length and re-trimmed to customer specifications. All sections are filled in Nylon 6, a hard wearing material, temperature resistant from -40°C up to 100°C.



#### How to specify Type 20 products

Part number  
(if standard):  
Section Code:  
Filling material:  
Overall length (A):  
Overall trim (D):



### Special Manufacture

BRUSH SECTION CODE	BRUSHSTRIP DIMENSIONS AND TOLERANCES					FILLING MATERIALS					
	SECTION DIMENSIONS			OVERALL LENGTH	OVERALL TRIM	SYNTHETIC		STEEL WIRE		PHOS. BRONZE NICKEL SILVER BRASS	
	Y	Z	(Tol)	A (Tol)	D (Tol)	(Min)	(Max)	(Min)	(Max)	(Min)	(Max)
M1	2.00	1.70	±0.25	Up to 1000 ±1.00	Up to 42 (max) ±0.50	0.06	0.20	0.06		0.06	
M2	2.10	1.80	±0.25			0.06	0.20	0.06		0.06	
A1	2.75	2.40	±0.25			0.06	0.25	0.06	0.11	0.06	0.13
A2	2.70	2.50	±0.25			0.06	0.25	0.06	0.11	0.06	0.13
A4	2.75	2.55	±0.25	1000 - 3000 ±1.50	Up to 130 ±1.00	0.06	0.20				
B1	3.85	3.80	±0.25			0.06	0.35	0.06	0.13	0.06	0.19
B2	4.00	3.70	±0.25			0.06	0.35	0.06	0.13	0.06	0.19
B4	3.85	3.70	±0.25			0.06	0.25				
C1	4.95	4.55	±0.25	Up to 1000 ±1.00	131 - 300 ±1.50	0.06	0.40	0.06	0.19	0.06	0.25
C2	5.05	4.60	±0.25			0.06	0.40	0.06	0.19	0.06	0.25
C4	5.00	4.40	±0.25			0.06	0.35				
D1	6.50	6.10	±0.25			0.06	0.50	0.06	0.25	0.06	0.29
D2	6.35	6.10	±0.25	Up to 1000 ±1.00	Over 300 ±2.00	0.06	0.50	0.06	0.25	0.06	0.29
E1	7.80	6.65	±0.25			0.06	0.60	0.06	0.29	0.06	0.34
E2	7.80	6.80	±0.25			0.06	0.60	0.06	0.29	0.06	0.34
G1	9.35	8.90	±0.50			0.06	0.90	0.06	0.34	0.06	0.46
G2	9.45	8.75	±0.50	1001 - 3000 ±2.00		0.06	0.90	0.06	0.34	0.06	0.46
H1	12.15	11.75	±1.00			0.06	2.00	0.06	0.46	0.06	0.56
H2	12.15	11.50	±1.00			0.06	2.00	0.06	0.46	0.06	0.56

#### Section codes and materials

Nominal size M-H

- 1: Electroplated mild steel (Galvanised)
- 2: Stainless Steel (AISI 304)
- 4: Aluminium

Tolerances shown are standard.  
Tighter tolerances can be achieved on request.  
(Dimensions are in mm).

(Illustrations are approximately full size)





**How to specify**

**Standard products**

Please specify standard products by using the part numbers and general descriptions shown on the detailed product pages.

**Special products**

Please specify custom made products by using the 'How to specify' guides shown on the detailed product pages together with any additional requirements.

Standard Range				
SECTION CODE	PART NUMBER	OVERALL LENGTH	BRUSH TRIM	FILLING MATERIAL
		A	D	
A1	H620A13014	3000.00	14.00	NYLON 0.15mm BLACK
A1	H620A13019	3000.00	19.00	NYLON 0.15mm BLACK
A1	H620A13919	3000.00	19.00	NYLON 0.15mm WHITE
B1	H620B13019	3000.00	19.00	NYLON 0.15mm BLACK
B1	H620B13032	3000.00	32.00	NYLON 0.15mm BLACK
B1	H620B13044	3000.00	45.00	NYLON 0.15mm BLACK
C1	H620C13022	3000.00	22.00	NYLON 0.15mm BLACK
D1	H620D13019	3000.00	19.00	NYLON 0.20mm BLACK
D1	H620D13025	3000.00	25.00	NYLON 0.20mm BLACK
D1	H620D13032	3000.00	32.00	NYLON 0.20mm BLACK
D1	H620D13038	3000.00	38.00	NYLON 0.20mm BLACK
D1	H620D13057	3000.00	57.00	NYLON 0.20mm BLACK
E1	H620E13051	3000.00	51.00	NYLON 0.30mm BLACK
E1	H620E13076	3000.00	76.00	NYLON 0.30mm BLACK
G1	H620G13057	3000.00	57.00	NYLON 0.50mm BLACK
G1	H620G13957	3000.00	57.00	NYLON 0.60mm WHITE
G1	H620G13076	3000.00	76.00	NYLON 0.30mm BLACK
G1	H620G13114	3000.00	114.00	NYLON 0.50mm BLACK
H1	H620H13229	3000.00	229.00	NYLON 0.90mm BLACK



Two pieces of brushstrip positioned opposite each other can provide an effective safe seal. This can be illustrated with our can and bottle bank seals. Every shape and size of cans and bottles can easily pass through the brush, the filaments close behind the bottle as it drops and smashes into the container. The brush ensures that glass can not escape from the entry hole making it safer for people to use.

**No matter how unusual or straight forward your company's brush requirements may be, our specialists will be delighted to advise you on your optimum solution.**

(Illustrations are approximately full size).

## Straight Brushstrip in Aluminium Carrier (180° flange)

**Type 25 Straight brushstrip in 180° flanged carrier**, is available in a range of standard sizes or manufactured to customer specification.

Carriers are extruded in aluminium 6063 T6, mill finish and can be provided with fixing holes, slots or other machined features together with anodised or painted finishes to customer specification. These provide a convenient and secure means of fixing to almost any surface.

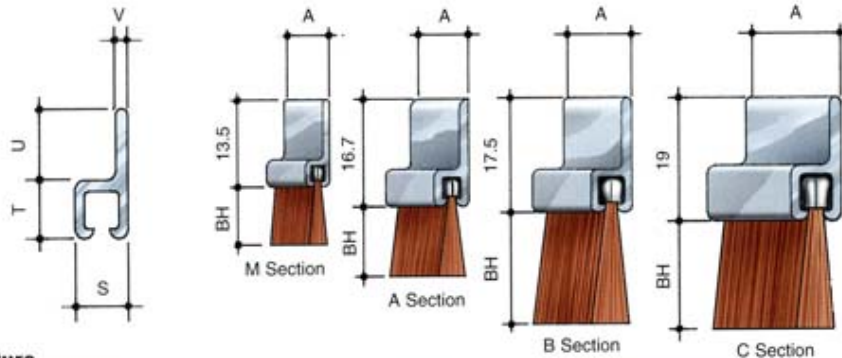
### Standard range

180°, 45° and 90° (see following pages). Available in 3000mm lengths, can also be supplied cut to length and re-trimmed to customer specification. All sections are filled in Nylon 6, a hard wearing material, temperature resistant from -40°C to 100°C.



#### How to specify Type 25 products

Part number (if standard):  
Section Code:  
Filling material:  
Brush Height (BH):  
Carrier Code:  
Overall length (A):



### Special Manufacture

BRUSHSTRIP DIMENSIONS AND TOLERANCES								FILLING MATERIALS					
BRUSH SECTION CODE	CARRIER CODE	CARRIER DIMENSIONS				OVERALL LENGTH	BRUSH TRIM	SYNTHETIC		STEEL WIRE		PHOS. BRONZE NICKEL SILVER BRASS	
		S	T	U	V			A	BH	(Min)	(Max)	(Min)	(Max)
M1	EA080	3.70	4.00	9.50	1.00	Up to 100 ±0.50	Up to 38 (max) ±0.50	0.06	0.20	0.06	0.06	0.06	0.06
M2	EA080	3.70	4.00	9.50	1.00			0.06	0.20	0.06	0.06	0.06	0.06
A1	EA033	5.20	5.60	11.10	1.40			0.06	0.25	0.06	0.11	0.06	0.13
A2	EA033	5.20	5.60	11.10	1.40			0.06	0.25	0.06	0.11	0.06	0.13
A4	EA033	5.20	5.60	11.10	1.40	101 - 1000 ±1.00	Up to 130 ±1.00	0.06	0.20	0.06	0.13	0.06	0.19
B1	EA030	6.50	6.70	10.80	1.60			0.06	0.35	0.06	0.13	0.06	0.19
B2	EA030	6.50	6.70	10.80	1.60			0.06	0.35	0.06	0.13	0.06	0.19
B4	EA030	6.50	6.70	10.80	1.60			0.06	0.25	0.06	0.19	0.06	0.25
C1	EA032	7.70	8.40	10.60	1.80	131 - 300 ±1.50	±1.00	0.06	0.40	0.06	0.19	0.06	0.25
C2	EA032	7.70	8.40	10.60	1.80			0.06	0.40	0.06	0.19	0.06	0.25
D1	EA031	10.00	10.80	17.30	1.90			0.06	0.50	0.06	0.25	0.06	0.29
D2	EA031	10.00	10.80	17.30	1.90			0.06	0.50	0.06	0.25	0.06	0.29
E1	EA053	10.50	11.80	18.20	1.90	1001 - 3000 ±1.50	Over 300 ±2.00	0.06	0.60	0.06	0.29	0.06	0.34
E2	EA053	10.50	11.80	18.20	1.90			0.06	0.60	0.06	0.29	0.06	0.34
G1	EA034	13.50	14.50	19.50	2.00			0.06	0.90	0.06	0.34	0.06	0.46
G2	EA034	13.50	14.50	19.50	2.00			0.06	0.90	0.06	0.34	0.06	0.46
H1	EA077	17.90	18.10	50.00	3.00	±1.50	±2.00	0.06	2.00	0.06	0.46	0.06	0.56
H2	EA077	17.90	18.10	50.00	3.00			0.06	2.00	0.06	0.46	0.06	0.56

#### Section codes

Nominal sizes: M-H

1: Electroplated mild steel (Galvanised)

2: Stainless Steel (AISI 304)

4: Aluminium

Refer to page 6 for section dimensions.

Tolerances shown are standard.

Tighter tolerances can be achieved on request.

(Dimensions are in mm).

(Illustrations are approximately full size)



### Standard Range

SECTION CODE	PART NUMBER	OVERALL LENGTH	BRUSH TRIM	FILLING MATERIAL
		A	BH	
A1	H610AF3014	3000.00	10.00	NYLON 0.15mm BLACK
A1	H610AF3019	3000.00	15.00	NYLON 0.15mm BLACK
A1	H610AF3919	3000.00	15.00	NYLON 0.15mm WHITE
B1	H610BF3019	3000.00	13.50	NYLON 0.15mm BLACK
B1	H610BF3032	3000.00	26.00	NYLON 0.15mm BLACK
B1	H610BF3044	3000.00	39.00	NYLON 0.15mm BLACK
C1	H610CF3022	3000.00	15.00	NYLON 0.15mm BLACK
D1	H610DF3019	3000.00	11.00	NYLON 0.20mm BLACK
D1	H610DF3025	3000.00	17.00	NYLON 0.20mm BLACK
D1	H610DF3032	3000.00	24.00	NYLON 0.20mm BLACK
D1	H610DF3038	3000.00	30.00	NYLON 0.20mm BLACK
D1	H610DF3057	3000.00	49.00	NYLON 0.20mm BLACK
E1	H610EF3051	3000.00	41.00	NYLON 0.30mm BLACK
E1	H610EF3076	3000.00	66.00	NYLON 0.30mm BLACK
G1	H610GF3057	3000.00	45.00	NYLON 0.50mm BLACK
G1	H610GF3957	3000.00	45.00	NYLON 0.60mm WHITE
G1	H610GF3076	3000.00	64.00	NYLON 0.30mm BLACK
G1	H610GF3114	3000.00	102.00	NYLON 0.50mm BLACK
H1	H610HF3229	3000.00	213.00	NYLON 0.90mm BLACK

We can help you find the solution.  
For free advice call us now on:  
**0117 947 5149**

Another use for straight brushstrip is within a desk or workstation, used to organise and control the numerous electrical cables from computers and telephones. The brushstrip also seals a gap preventing pens and debris from falling down the back of the office furniture.

The main advantage in fitting brush is the way the filaments hold the cables firmly in position while stationary yet allows the cables to be relocated when necessary.

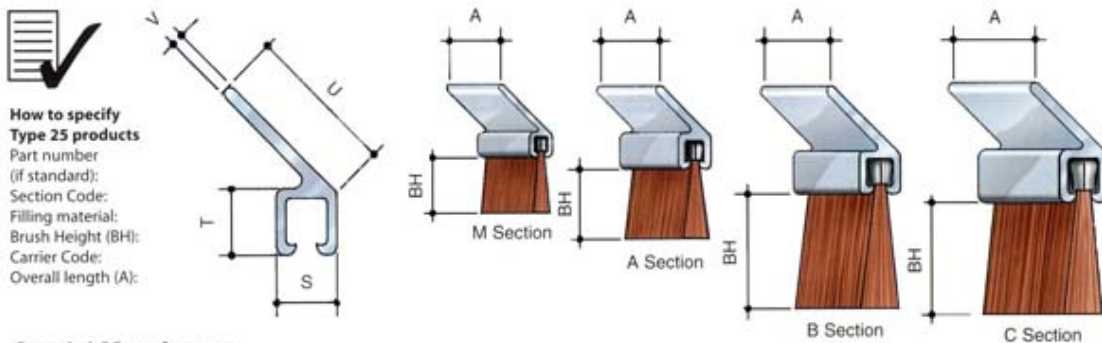


(Illustrations are approximately full size)

## Straight Brushstrip in Aluminium Carrier (45° flange)

Type 25 Straight brushstrip in 45° flanged carrier, is available in a range of standard sizes or manufactured to customer specification.

The 45° angle allows this type to be fitted so that the filaments can be deflected and therefore do not become deformed. This is particularly important on moving components such as the base of a roller shutter door (see page 65).



**How to specify Type 25 products**  
 Part number (if standard):  
 Section Code:  
 Filling material:  
 Brush Height (BH):  
 Carrier Code:  
 Overall length (A):

### Special Manufacture

BRUSHSTRIP DIMENSIONS AND TOLERANCES								FILLING MATERIALS					
BRUSH SECTION CODE	CARRIER CODE	CARRIER DIMENSIONS				OVERALL LENGTH	BRUSH TRIM	SYNTHETIC		STEEL WIRE		PHOS. BRONZE NICKEL SILVER BRASS	
		S	T	U	V			(Min)	(Max)	(Min)	(Max)	(Min)	(Max)
M1	EA081	3.70	4.00	12.00	1.00	Up to 100 ±0.50	Up to 38 (max) ±0.50	0.06	0.20	0.06		0.06	
M2	EA081	3.70	4.00	12.00	1.00			0.06	0.20	0.06		0.06	
A1	EA059	5.20	5.60	12.00	1.40			0.06	0.25	0.06	0.11	0.06	0.13
A2	EA059	5.20	5.60	12.00	1.40			0.06	0.25	0.06	0.11	0.06	0.13
A4	EA059	5.20	5.60	12.00	1.40	101 - 1000 ±1.00	Up to 130 ±1.00	0.06	0.20				
B1	EA060	6.70	6.70	16.00	1.60			0.06	0.35	0.06	0.13	0.06	0.19
B2	EA060	6.70	6.70	16.00	1.60			0.06	0.35	0.06	0.13	0.06	0.19
B4	EA060	6.70	6.70	16.00	1.60			0.06	0.25				
C1	EA062	8.10	8.40	17.00	1.80	101 - 1000 ±1.00	131 - 300 ±1.50	0.06	0.40	0.06	0.19	0.06	0.25
C2	EA062	8.10	8.40	17.00	1.80			0.06	0.40	0.06	0.19	0.06	0.25
D1	EA036	10.00	10.80	24.00	1.90			0.06	0.50	0.06	0.25	0.06	0.29
D2	EA036	10.00	10.80	24.00	1.90			0.06	0.50	0.06		0.06	0.29
E1	EA056	10.50	11.80	26.00	1.90	1001 - 3000 ±1.50	Over 300 ±2.00	0.06	0.60	0.06	0.29	0.06	0.34
E2	EA056	10.50	11.80	26.00	1.90			0.06	0.60	0.06	0.29	0.06	0.34
G1	EA037	13.50	14.50	29.00	2.00			0.06	0.90	0.06	0.34	0.06	0.46
G2	EA037	13.50	14.50	29.00	2.00			0.06	0.90	0.06	0.34	0.06	0.46
H1	EA078	17.90	18.10	50.00	3.00	1001 - 3000 ±1.50	Over 300 ±2.00	0.06	2.00	0.06	0.46	0.06	0.56
H2	EA078	17.90	18.10	50.00	3.00			0.06	2.00	0.06	0.46	0.06	0.56

#### Section codes

Nominal sizes: M-H

1: Electroplated mild steel (Galvanised)

2: Stainless steel (AISI 304)

4: Aluminium

Refer to page 6 for section dimensions.

Tolerances shown are standard.

Tighter tolerances can be achieved on request.

(Dimensions are in mm).

(Illustrations are approximately full size).



Standard Range				
SECTION CODE	PART NUMBER	OVERALL LENGTH	BRUSH TRIM	FILLING MATERIAL
		A	BH	
A1	H610AR3014	3000.00	10.00	NYLON 0.15mm BLACK
A1	H610AR3019	3000.00	15.00	NYLON 0.15mm BLACK
A1	H610AR3919	3000.00	15.00	NYLON 0.15mm WHITE
B1	H610BR3019	3000.00	13.50	NYLON 0.15mm BLACK
B1	H610BR3032	3000.00	26.00	NYLON 0.15mm BLACK
B1	H610BR3044	3000.00	39.00	NYLON 0.15mm BLACK
C1	H610CR3022	3000.00	15.00	NYLON 0.15mm BLACK
D1	H610DR3019	3000.00	11.00	NYLON 0.20mm BLACK
D1	H610DR3025	3000.00	17.00	NYLON 0.20mm BLACK
D1	H610DR3032	3000.00	24.00	NYLON 0.20mm BLACK
D1	H610DR3038	3000.00	30.00	NYLON 0.20mm BLACK
D1	H610DR3057	3000.00	49.00	NYLON 0.20mm BLACK
E1	H610ER3051	3000.00	41.00	NYLON 0.30mm BLACK
E1	H610ER3076	3000.00	66.00	NYLON 0.30mm BLACK
G1	H610GR3057	3000.00	45.00	NYLON 0.50mm BLACK
G1	H610GR3957	3000.00	45.00	NYLON 0.50mm WHITE
G1	H610GR3076	3000.00	64.00	NYLON 0.30mm BLACK
G1	H610GR3114	3000.00	102.00	NYLON 0.50mm BLACK
H1	H610HR3229	3000.00	213.00	NYLON 0.90mm BLACK

We can help you find the solution.  
For free advice call us now on:  
**0117 947 5149**

Any process that requires manual handling has an element of danger, particularly for machine operators. A purpose made brushstrip can be used as a guard to prevent fingers moving close to dangerous equipment without causing inconvenience to the operator and hampering the performance of the machine. The brushstrip can be manufactured in a colour to blend in with the surroundings or in a contrasting warning colour to be highly visible.



(Illustrations are approximately full size).

## Straight Brushstrip in Aluminium Carrier (90° flange)

Type 25 Straight brushstrip in 90° flanged carrier, is available in a range of standard sizes or manufactured to customer specification. The 90° angle is particularly useful for accommodating sliding components such as hangar door sections or the tops of roller shutter doors.

### Standard range

Available in 3000mm lengths, this selection, as shown in the opposite table, can also be supplied cut to length and re-trimmed to customer specification. All sections are filled in Nylon 6, a hard wearing material, temperature resistant from -40°C to 100°C.



#### How to specify Type 25 products

Part number (if standard):

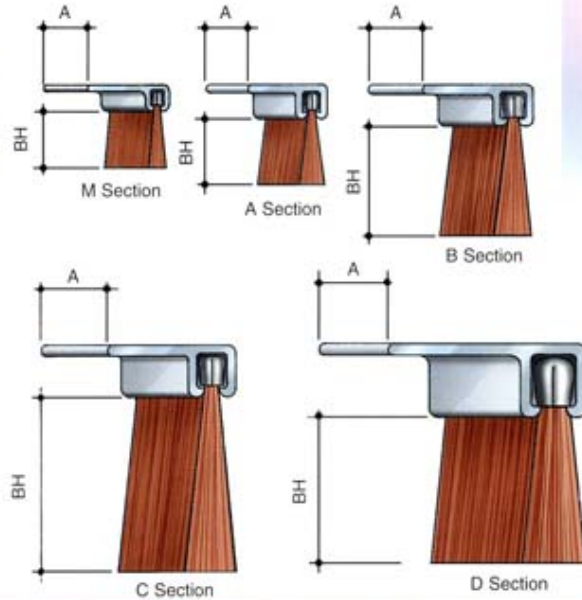
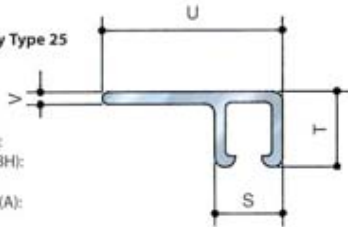
Section Code:

Filling material:

Brush Height (BH):

Carrier Code:

Overall length (A):



### Special Manufacture

BRUSHSTRIP DIMENSIONS AND TOLERANCES							FILLING MATERIALS						
BRUSH SECTION CODE	CARRIER CODE	CARRIER DIMENSIONS				OVERALL LENGTH	BRUSH TRIM	SYNTHETIC		STEEL WIRE		PHOS. BRONZE NICKEL SILVER BRASS	
		S	T	U	V			(Min)	(Max)	(Min)	(Max)	(Min)	(Max)
M1	EA082	3.70	4.00	13.10	1.00	Up to 100 ±0.50	Up to 38 (max) ±0.50	0.06	0.20	0.06		0.06	
M2	EA082	3.70	4.00	13.10	1.00			0.06	0.20	0.06		0.06	
A1	EA058	5.20	5.60	14.00	1.40			0.06	0.25	0.06	0.11	0.06	0.13
A2	EA058	5.20	5.60	14.00	1.40			0.06	0.25	0.06	0.11	0.06	0.13
A4	EA058	5.20	5.60	14.00	1.40	101 - 1000 ±1.00	Up to 130 ±1.00	0.06	0.20				
B1	EA054	6.50	6.70	17.50	1.60			0.06	0.35	0.06	0.13	0.06	0.19
B2	EA054	6.50	6.70	17.50	1.60			0.06	0.35	0.06	0.13	0.06	0.19
B4	EA054	6.50	6.70	17.50	1.60			0.06	0.25				
C1	EA061	8.10	8.40	22.00	1.80			0.06	0.40	0.06	0.19	0.06	0.25
C2	EA061	8.10	8.40	22.00	1.80			0.06	0.40	0.06	0.19	0.06	0.25
D1	EA052	10.00	11.20	27.00	1.90			0.06	0.50	0.06	0.25	0.06	0.29
D2	EA052	10.00	11.20	27.00	1.90			0.06	0.50	0.06	0.25	0.06	0.29
E1	EA057	10.50	11.80	29.00	1.90	131 - 300 ±1.50	±1.50	0.06	0.60	0.06	0.29	0.06	0.34
E2	EA057	10.50	11.80	29.00	1.90			0.06	0.60	0.06	0.29	0.06	0.34
G1	EA035	13.50	14.50	35.00	2.00			0.06	0.90	0.06	0.34	0.06	0.46
G2	EA035	13.50	14.50	35.00	2.00			0.06	0.90	0.06	0.34	0.06	0.46
H1	EA079	17.90	18.10	67.90	3.00	1001 - 3000 ±1.50	Over 300 ±2.00	0.06	2.00	0.06	0.46	0.06	0.56
H2	EA079	17.90	18.10	67.90	3.00			0.06	2.00	0.06	0.46	0.06	0.56

#### Section codes

Nominal size: M-H

1: Electroplated mild steel (Galvanised)

2: Stainless steel (AISI 304)

4: Aluminium

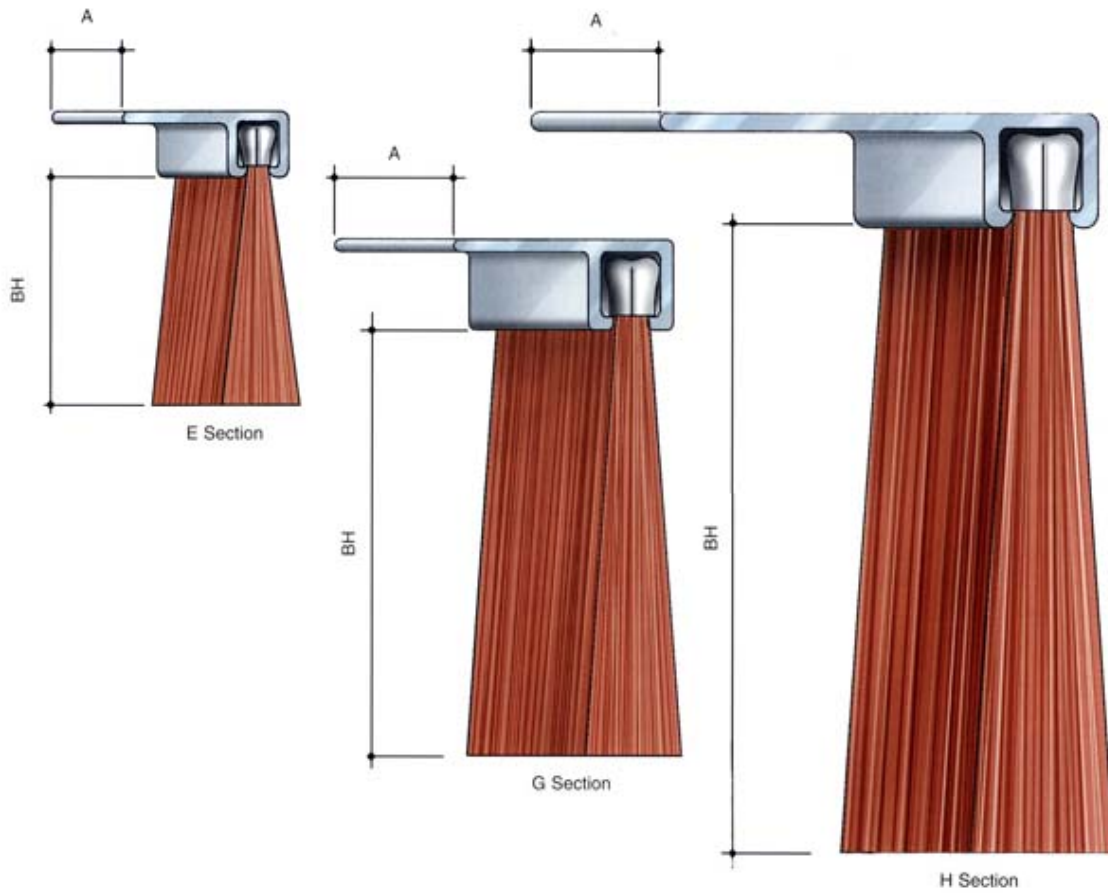
Refer to page 6 for section dimensions.

Tolerances shown are standard.

Tighter tolerances can be achieved on request.

(Dimensions are in mm).

(Illustrations are approximately full size).



**Standard Range**

SECTION CODE	PART NUMBER	OVERALL LENGTH	BRUSH TRIM		FILLING MATERIAL
			A	BH	
A1	H610AT3014	3000.00	10.00		NYLON 0.15mm BLACK
A1	H610AT3019	3000.00	15.00		NYLON 0.15mm BLACK
A1	H610AT3919	3000.00	15.00		NYLON 0.15mm WHITE
B1	H610BT3019	3000.00	13.50		NYLON 0.15mm BLACK
B1	H610BT3032	3000.00	26.00		NYLON 0.15mm BLACK
B1	H610BT3044	3000.00	39.00		NYLON 0.15mm BLACK
C1	H610CT3022	3000.00	15.00		NYLON 0.15mm BLACK
D1	H610DT3019	3000.00	11.00		NYLON 0.20mm BLACK
D1	H610DT3025	3000.00	17.00		NYLON 0.20mm BLACK
D1	H610DT3032	3000.00	24.00		NYLON 0.20mm BLACK
D1	H610DT3038	3000.00	30.00		NYLON 0.20mm BLACK
D1	H610DT3057	3000.00	49.00		NYLON 0.20mm BLACK
E1	H610ET3051	3000.00	41.00		NYLON 0.30mm BLACK
E1	H610ET3076	3000.00	66.00		NYLON 0.30mm BLACK
G1	H610GT3057	3000.00	45.00		NYLON 0.50mm BLACK
G1	H610GT3957	3000.00	45.00		NYLON 0.60mm WHITE
G1	H610GT3076	3000.00	64.00		NYLON 0.30mm BLACK
G1	H610GT3114	3000.00	102.00		NYLON 0.50mm BLACK
H1	H610HT3229	3000.00	213.00		NYLON 0.90mm BLACK

(Illustrations are approximately full size).



A brush seal can be used for practical and decorative reasons. Prestige cars often use goat hair filaments because of their luxurious feel and natural shine. When used as a gear lever seal the brushes stop debris entering the gear shift housing while allowing the gear lever to move freely. The independent filaments close either side of the lever maintaining a perfect seal.

## Pest Control – Case Study

*Pest control is one of the simplest applications for brushstrip and it has been in use for over 25 years.*

*For companies throughout the food chain, pest control is an expensive problem. Poisons are effective but require regular visits to replenish the bait. For many industries the body of a poisoned rodent causes another problem – contamination of storage areas.*

*We have found the best solution for pest control is PREVENTION, and our range of brushstrip seals any gap, any shape, any size.*

*Tests have shown that Kleeneze*

### Case Study

We offer our customers the Kleeneze Sealtech brushstrip range as an effective method of preventing rodent and crawling insect infestations. Our tests have proved that the high quality filaments used in manufacture makes this range of brushstrip ideal for pest control proofing work. It is particularly suitable for sealing gaps on uneven floors, bases of and sides of roller shutter and concertina doors, and the top of any door against bird entry.

### Rentokil Initial



*Each filament is free to move independently so providing an effective seal for uneven gaps. Nylon filaments slide easily when doors are opened and do not impede movement. They are hard wearing and should be effective well beyond five years.*

*Sealtech brushstrip gives excellent protection against rat and mouse entry; when fitted correctly it provides a formidable barrier which rodents are unable to gnaw through.*

*Our standard brushstrip range is supplied in three metre lengths or can be formed into inverted rings to fit around pipe and cable entries. The concertina door kits seal each panel without impeding the door's folding ability. The glass door kit enables brushstrip to be fitted to all glass doors that are frequently used in large retail stores and supermarkets – which are particularly exposed to rodents at night.*

Straight Strip p 6-13



Inverted Rings p 17-19



Glass Door Kits p 61



Concertina Door Kits p 64



Roller Shutter Doors p 65



Domestic Door Seals p 56-63



*In addition to our versatile range of brushstrip we also have products specially designed to seal difficult gaps around the roofs of storage buildings.*

*Bird Bristle: twisted in wire brushes easily pushed into eaves and high level gaps, allow good ventilation but prevent birds nesting.*



*Eaves Seals: Brushstrip held in a rigid PVC carrier used to seal eaves to prevent birds and insects entering the building.*





## Escalator Safetystrip – Case Study

In the early 1980s, London Transport was looking for ways to provide greater safety for the millions of passengers who daily used its escalators.

From all over the world disturbing reports had been coming in of accidents, usually involving children who had caught a limb or clothing in the small gap between the step and the side wall.

London Transport, probably the country's largest escalator operator, set about seeking a product which would avert any passenger accident, yet still enable the escalators to function under peak load.

Some of the design considerations:

- It must be aesthetically pleasing
- It must be durable and hard wearing
- It must be adaptable to different types of escalators
- It must not be an additional hazard to passengers
- Cost had to be kept to a minimum.

They found the solution at Kleeneze Sealtech – ESCALATOR SAFETYSTRIP™. Using our brushstrip expertise, we designed a product specifically for London Transport, which met all the above criteria.

The innovative shape allowed a line of brushstrip to be fitted on the side walls of an escalator at foot level. The brush deflector gently guides



passengers away from a hazard zone to a safer place on the step.

Escalator Safetystrip™ is not only widely fitted throughout London Transport Underground System, but also in high street stores, airports, shopping malls and public places all over the world – wherever escalators are in daily use.

### Major installers:

Hong Kong Metro  
New York City Transit Authority  
Washington DC Metropolitan Area Transit Authority  
Taipei Metro  
California Bay Area Transit Authority  
Barcelona Metro  
Madrid Metro  
Gatwick and Heathrow Airport



Escalator Safetystrip™ fitted on the Trocadero, London.

### Case Study

In the year prior to installation there were 20 side entrapment accidents on the New York Metro. One escalator was selected for a trial fitting of Escalator Safetystrip™. In the following year there were no recorded accidents, the brushstrip required no maintenance and the brushes did not incur damage. As a result a program was undertaken to fit Escalator Safetystrip™ on all escalators throughout the Metro system.

*"The success of these brushes is nothing less than perfect."*

**New York City Transit Authority**



## Brushstrip Inverted Coil

Brushstrip inverted coils are manufactured to customer specification, in single ring, extended coil or close coil formation suitable for sealing, wiping and cleaning applications.

Available in eight nominal section sizes, inverted coils can be filled in a range of synthetic, natural, metallic or mixed materials, selection to suit application. Refer to page 46 for material properties.

Single rings and segments can be specifically trimmed to match contoured profiles

### Type 46

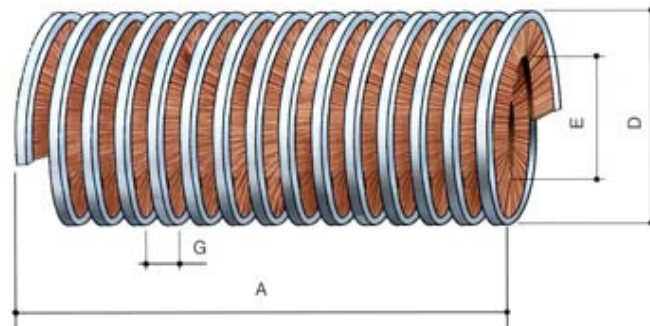
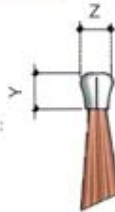
#### Brushstrip inverted extended coil

Manufactured to order, to customer specification, RH or LH coil, material selection to suit application.  
Refer to table for manufacturing limits.



#### How to specify Type 46 products

Section code:  
Filling material:  
Length (A):  
Overall diameter (D):  
Inside diameter (E):  
Pitch (G):  
RH or LH coil:



## Special Manufacture

BRUSH SECTION CODE	BRUSHSTRIP DIMENSIONS AND TOLERANCES						FILLING MATERIALS					
	SECTION DIMENSIONS			OVERALL DIAMETER		OVERALL LENGTH	SYNTHETIC		STEEL WIRE		PHOS. BRONZE NICKEL SILVER BRASS	
	Y	Z	(Tol)	D (Min)	D (Tol)	A (Tol)	(Min)	(Max)	(Min)	(Max)	(Min)	(Max)
M1	2.00	1.70	±0.25	20.00			0.06	0.20	0.06			0.06
M2	2.10	1.80	±0.25	35.00	Min to 130	Up to 75	0.06	0.20	0.06			0.06
A1	2.75	2.40	±0.25	20.00	±1.00	±2.00	0.06	0.25	0.06	0.11	0.06	0.13
A2	2.70	2.50	±0.25	35.00			0.06	0.25	0.06	0.11	0.06	0.13
B1	3.85	3.80	±0.25	48.00	131 – 300		0.06	0.30	0.06	0.13	0.06	0.19
B2	4.00	3.70	±0.25	63.50	±1.50	76 – 150	0.06	0.30	0.06	0.13	0.06	0.19
C1	4.95	4.55	±0.25	60.00		±3.00	0.06	0.35	0.06	0.19	0.06	0.25
C2	5.05	4.60	±0.25	70.00	Over 300		0.06	0.35	0.06	0.19	0.06	0.25
D1	6.50	6.10	±0.25	65.00	±2.00		0.06	0.45	0.06	0.25	0.06	0.29
D2	6.35	6.10	±0.25	80.00		151 – 300	0.06	0.45	0.06	0.25	0.06	0.29
E1	7.80	6.65	±0.25	100.00		±4.00	0.06	0.50	0.06	0.29	0.06	0.34
E2	7.80	6.80	±0.25	120.00	Min – 350		0.06	0.50	0.06	0.29	0.06	0.34
G1	9.35	8.90	±0.50	152.00	±2.00		0.06	0.90	0.06	0.34	0.06	0.46
G2	9.45	8.75	±0.50	165.00		Over 300	0.06	0.90	0.06	0.34	0.06	0.46
H1	12.15	11.75	±1.00	254.00	Over 350	±6.00	0.06	1.40	0.06	0.46	0.06	0.56
H2	12.15	11.50	±1.00	305.00	±2.50		0.06	1.40	0.06	0.46	0.06	0.56

#### Section code

Nominal size: M-H

- 1: Electroplated mild steel (Galvanised)
- 2: Stainless steel (AISI 304)

Refer to page 6 for section dimensions.

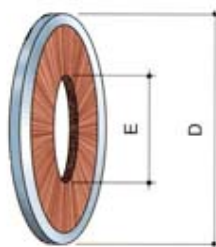
Tolerances shown are standard.

Tighter tolerances can be achieved on request.  
(Dimensions are in mm).

**Type 32**

**Brushstrip inverted single ring or segment.**

Manufactured to customer specification, material selection to suit application.  
Refer to table for manufacturing limits.



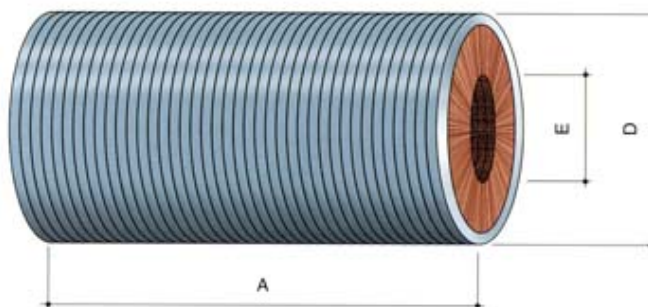
**How to specify Type 32 products**  
Section code:  
Filling material:  
Overall diameter (D):  
Inside diameter (E):  
Degree of segment

We can help you find the solution.  
For free advice call us **now** on:  
**0117 947 5149**

**Type 33**

**Brushstrip inverted close coil**

Manufactured to order, to customer specification, RH or LH coil, material selection to suit application.  
Refer to table for manufacturing limits.



**How to specify Type 33 products**  
Section code:  
Filling material:  
Length (A):  
Overall diameter (D):  
Inside diameter (E):  
RH or LH coil:

**No matter how unusual or straight forward your company's brush requirements may be, our specialists will be delighted to advise you on your optimum solution.**

*Brushstrip is so adaptable it can be shaped into a ring to fit inside a tube or shaft making a perfect seal. The brush filaments allow for movement and are therefore ideal as a seal against rotating machinery.*



## Brushstrip External Coil

Brushstrip external coils are manufactured to order, to customer specification, in single ring, extended coil or close coil formation suitable for self assembly on to customers own core.

Available in nominal section sizes M-H, in either electroplated mild steel or stainless steel strip, brushstrip coils can be filled in a range of synthetic, natural, metallic or mixed materials, straight or profiled trim. Selection to suit application. Refer to page 46 for material properties.

### Type 47

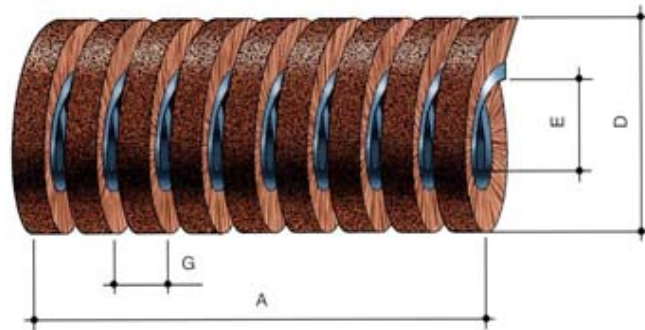
#### Brushstrip external extended coil

Manufactured to order, to customer specification, RH or LH coil, material selection to suit application. Refer to table for manufacturing limits.



#### How to specify Type 47 products

Section code:  
Filling material:  
Length (A):  
Overall diameter (D):  
Inside diameter (E):  
Pitch (G):  
RH or LH coil:



## Special Manufacture

BRUSH SECTION CODE	BRUSHSTRIP DIMENSIONS AND TOLERANCES						FILLING MATERIALS						
	SECTION DIMENSIONS			INSIDE DIAMETER		OVERALL DIAMETER	OVERALL LENGTH	SYNTHETIC		STEEL WIRE		PHOS. BRONZE NICKEL SILVER BRASS	
	Y	Z	(Tol)	E (Min)	E (Tol)	D	A	(Min)	(Max)	(Min)	(Max)	(Min)	(Max)
M1	2.00	1.70	±0.25	5.00				0.06	0.20	0.06		0.06	
M2	2.10	1.80	±0.25	10.00	Min to 20			0.06	0.20	0.06		0.06	
A1	2.75	2.40	±0.25	6.50	±0.25	Up to 25	Up to 300	0.06	0.25	0.06	0.11	0.06	0.13
A2	2.70	2.50	±0.25	10.00		±0.25	±2.00	0.06	0.25	0.06	0.11	0.06	0.13
B1	3.85	3.80	±0.25	9.50	21 - 75			0.06	0.30	0.06	0.13	0.06	0.19
B2	4.00	3.70	±0.25	12.50	±0.50	26 - 130	301 - 1000	0.06	0.30	0.06	0.13	0.06	0.19
C1	4.95	4.55	±0.25	12.50		±1.00	±3.00	0.06	0.35	0.06	0.19	0.06	0.25
C2	5.05	4.60	±0.25	19.00	76 - 150			0.06	0.35	0.06	0.19	0.06	0.25
D1	6.50	6.10	±0.25	22.00	±1.00	131 - 300	1001 - 2000	0.06	0.45	0.06	0.25	0.06	0.29
D2	6.35	6.10	±0.25	25.00		±1.50	±5.00	0.06	0.45	0.06	0.25	0.06	0.29
E1	7.80	6.65	±0.25	32.00	151 - 300			0.06	0.50	0.06	0.29	0.06	0.34
E2	7.80	6.80	±0.25	38.00	±1.50	Over 300	Over 2000	0.06	0.50	0.06	0.29	0.06	0.34
G1	9.35	8.90	±0.50	44.50		±2.00	±6.00	0.06	0.90	0.06	0.34	0.06	0.46
G2	9.45	8.75	±0.50	51.00	Over 300			0.06	0.90	0.06	0.34	0.06	0.46
H1	12.15	11.75	±1.00	76.00	±2.50			0.06	1.40	0.06	0.46	0.06	0.56
H2	12.15	11.50	±1.00	89.00				0.06	1.40	0.06	0.46	0.06	0.56

#### Section code

Nominal size: M-H

- 1: Electroplated mild steel (Galvanised)
- 2: Stainless steel (AISI 304)

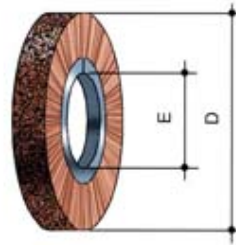
Tolerances shown are standard

Tighter tolerances can be achieved on request  
(Dimensions are in mm)

**Type 34**

**Brushstrip external single ring or segment**

Manufactured to customer specification, material selection to suit application.  
Refer to table for manufacturing limits.



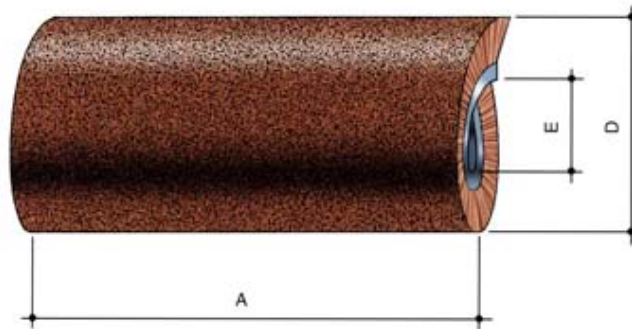
**How to specify Type 34 products**  
Section code:  
Filling material:  
Overall diameter (D):  
Inside diameter (E):  
Degree of segment

We can help you find the solution.  
For free advice call us **now** on:  
**0117 947 5149**

**Type 35**

**Brushstrip external close coil**

Manufactured to customer specification, RH or LH coil, material selection to suit application.  
Refer to table for manufacturing limits.



**How to specify Type 35 products**  
Section code:  
Filling material:  
Length (A):  
Overall diameter (D):  
Inside diameter (E):



We can also supply rollerbrushes complete with shaft or fit to free issue customer's core.



*The gentle transportation of food and ingredients during manufacture has always caused a problem, especially moving up or down a slope. A spiral brush is used to transport ingredients in a controlled manner without causing damage. Brightly coloured filaments are often used to ensure traceability.*

## Brushstrip Cup Shape

Brushstrip formed cup shape is manufactured to customer specification, in complete ring or segments for sealing and cleaning applications.

Available in nominal sections sizes M-H, in either electroplated mild steel or stainless steel strip, brushstrip cups can be filled in a range of synthetic, natural, metallic or mixed materials, straight or profiled trim. Selection to suit application. Refer to page 46 for material properties.

### Type 36

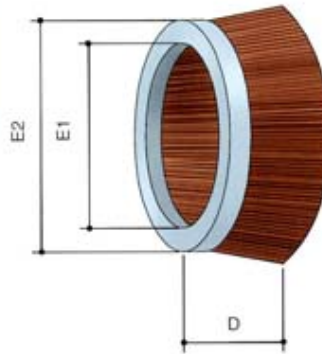
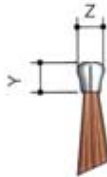
#### Brushstrip cup shape form

Manufactured to customer specification, material selection to suit application. Refer to table for manufacturing limits.



#### How to specify Type 36 products

Section code:  
Filling material:  
Overall trim (D):  
Inside diameter (E1) or  
Outside diameter (E2):  
Degree of segment:



Brushstrip can be specially manufactured as an integral component in industrial machinery. The process of bead blasting metal surfaces is made quicker and safer by the use of a cup brush. The brush is specially manufactured from tough hardwearing nylon. It contains the beads as they strike the surface and the seal helps maintain the vacuum.

## Special Manufacture

BRUSH SECTION CODE	BRUSHSTRIP SECTION			LIMITS AND TOLERANCES			FILLING MATERIALS					
	SECTION DIMENSIONS			BRUSH DIAMETER		OVERALL TRIM	SYNTHETIC		STEEL WIRE		PHOS. BRONZE NICKEL SILVER BRASS	
	Y	Z	(Tol)	E (Min)	E1 or E2	D	(Min)	(Max)	(Min)	(Max)	(Min)	(Max)
M1	2.00	1.70	±0.25	9.50			0.06	0.20	0.06		0.06	
M2	2.10	1.80	±0.25	25.00			0.06	0.20	0.06		0.06	
A1	2.75	2.40	±0.25	9.50	Min to 75	Up to 45	0.06	0.25	0.06	0.11	0.06	0.13
A2	2.70	2.50	±0.25	13.00	±0.50	±0.50	0.06	0.25	0.06	0.11	0.06	0.13
B1	3.85	3.80	±0.25	22.00			0.06	0.30	0.06	0.13	0.06	0.19
B2	4.00	3.70	±0.25	25.50		Up to 75	0.06	0.30	0.06	0.13	0.06	0.19
C1	4.95	4.55	±0.25	25.50	76 - 300	±0.50	0.06	0.35	0.06	0.19	0.06	0.25
C2	5.05	4.60	±0.25	32.00	±1.00		0.06	0.35	0.06	0.19	0.06	0.25
D1	6.50	6.10	±0.25	28.50		76 - 300	0.06	0.45	0.06	0.25	0.06	0.29
D2	6.35	6.10	±0.25	38.00		±1.00	0.06	0.45	0.06	0.25	0.06	0.29
E1	7.80	6.65	±0.25	44.50			0.06	0.50	0.06	0.29	0.06	0.34
E2	7.80	6.80	±0.25	51.00	Over 300	Over 300	0.06	0.50	0.06	0.29	0.06	0.34
G1	9.35	8.90	±0.50	51.00	±1.50	±1.50	0.06	0.90	0.06	0.34	0.06	0.46
G2	9.45	8.75	±0.50	63.50			0.06	0.90	0.06	0.34	0.06	0.46
H1	12.15	11.75	±1.00	70.00	Over Min		0.06	1.40	0.06	0.46	0.06	0.56
H2	12.15	11.50	±1.00	76.00	±1.50		0.06	1.40	0.06	0.46	0.06	0.56

#### Section code

Nominal size: M-H

1: Electroplated mild steel (Galvanised)

2: Stainless steel (AISI 304)

Refer to page 6 for section dimensions.

Tolerances shown are standard.

Tighter tolerances can be achieved on request.

(Dimensions are in mm).

## Straight Brushstrip with Steel Flange

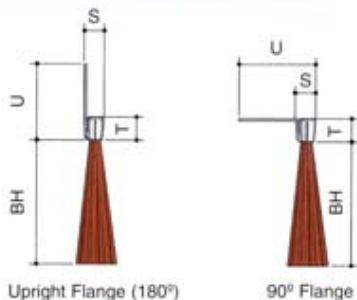
Using a combination of brushstrip with a carrier, these brushes are made using one piece of galvanised steel. The resulting brush provides a rigid and robust product with secure filaments which is well suited to harsh industrial environments. Ideal as a seal against dust, draughts, light, heat and noise.

Standard sizes shown below, available in a wide range of filaments listed on page 46.

We can help you find the solution.  
For free advice call us now on:  
**000 0117 947 5149**



**How to specify**  
Part number (if standard):  
Section Code:  
Filling material:  
Overall length: (A)  
Brush Trim: (BH)



### Standard Range

TYPE	FLANGE	CARRIER DIMENSIONS			PART NUMBER	BRUSH TRIM	LENGTH	FILLING MATERIAL
		S	T	U		BH	A	
6a - 15	Upright	6.00	7.00	15.00	37300005	25.00	1000.00	Horse Hair Mane
6a - 25	Upright	6.00	7.00	25.00	37400006	25.00	1000.00	Horse Hair Mane
6a - 25	Upright	6.00	7.00	25.00	37400779	35.00	1000.00	Horse Hair Mane
6a - 25	Upright	6.00	7.00	25.00	37400062	25.00	1000.00	Nylon 0.25 Black
6a - 25	Upright	6.00	7.00	25.00	37400683	25.00	1000.00	Phosphor Bronze 0.10
6a - 35	Upright	6.00	7.00	35.00	37500020	35.00	1000.00	Nylon 0.30 Black
6d - 40	Upright	10.00	10.50	40.00	39600116	30.00	1000.00	Nylon 0.50 Black
6d - 40	Upright	10.00	10.50	40.00	39607270	50.00	1000.00	Nylon 0.55 Black
6d - 50	Upright	10.00	10.50	50.00	39700006	60.00	2000.00	Nylon 0.40 Black
6d - 50	Upright	10.00	10.50	50.00	39700007	60.00	2000.00	Polypropylene 0.40
6c - 23	90°	6.00	7.00	23.00	38380006	28.00	1000.00	Horse Hair Mane
6c - 23	90°	6.00	7.00	23.00	38380321	28.00	1000.00	Nylon 0.25 Black
6e - 50	90°	10.00	10.50	50.00	38600001	29.50	1000.00	Nylon 0.50 Black



Refer to page 8 for brushstrip with separate carrier.

### Special Manufacture

TYPE	FLANGE	CARRIER DIMENSIONS			BRUSH TRIM		SYNTHETICS		METALLICS	
		S	T	U	(Min)	(Min)	(Min)	(Max)	(Min)	(Max)
6a - 15	Upright	6.00	7.00	15.00	7.00	75.00	0.10	0.50	0.06	0.30
6a - 25	Upright	6.00	7.00	25.00	7.00	75.00	0.10	0.50	0.06	0.30
6a - 35	Upright	6.00	7.00	35.00	7.00	75.00	0.10	0.50	0.06	0.30
6d - 40	Upright	10.00	10.50	40.00	10.00	190.00	0.20	0.80	0.10	0.50
6d - 50	Upright	10.00	10.50	50.00	10.00	190.00	0.20	0.80	0.10	0.50
6c - 23	90°	6.00	7.00	23.00	7.00	75.00	0.10	0.50	0.06	0.30
6e - 50	90°	10.00	10.50	50.00	10.00	190.00	0.20	0.80	0.10	0.50

## Formed Brushstrip in Carrier

Formed brushstrip in carrier provides the brush with an integral fixing flange for simple mounting on to any surface. In addition to the materials shown in the table, brushstrip can be filled in hair, bristle, fibre or mixed materials, sections to suit application.

Carriers are extruded in aluminium 6063, mill finish and can be provided with fixing holes, slots or other machined features to customer specification. Certain forms can be supplied with painted or anodised finishes.

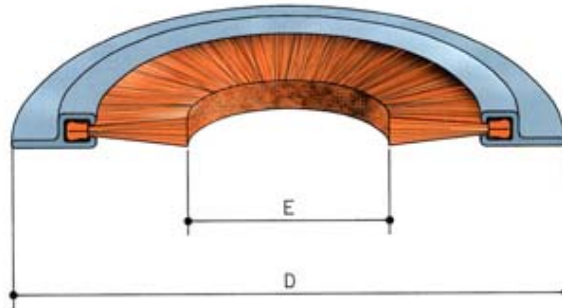
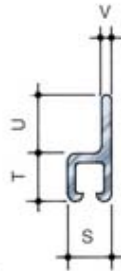
### Type 43

Brushstrip in carrier  
Inverted single ring or segment

Manufactured to customers specification in single ring or segments, complete with aluminium fixing carrier. Material selection to suit application. Refer to page 48 for material properties.



**How to specify Type 43 products**  
Section Code:  
Filling material:  
Overall diameter (D):  
Inside diameter (E):  
Degree of segment:



### Special Manufacture

BRUSHSTRIP AND CARRIER SECTION					LIMITS			FILLING MATERIALS						
BRUSH SECTION CODE	CARRIER REF	CARRIER DIMENSIONS				TYPE 43	TYPE 44	TYPE 45	SYNTHETIC		STEEL WIRE		PHOS. BRONZE NICKEL SILVER BRASS	
		S	T	U	V				(Min)	(Max)	(Min)	(Max)	(Min)	(Max)
M1	EA080	3.70	4.00	9.50	1.00	110	95	95	0.06	0.20	0.06	0.11	0.06	0.13
M2	EA080	3.70	4.00	9.50	1.00	110	95	95	0.06	0.20	0.06	0.11	0.06	0.13
A1	EA033	5.20	5.60	11.10	1.40	110	95	95	0.06	0.25	0.06	0.11	0.06	0.13
A2	EA033	5.20	5.60	11.10	1.40	110	95	95	0.06	0.25	0.06	0.11	0.06	0.13
B1	EA030	6.50	6.70	10.80	1.60	150	95	95	0.06	0.30	0.06	0.13	0.06	0.19
B2	EA030	6.50	6.70	10.80	1.60	150	95	95	0.06	0.30	0.06	0.13	0.06	0.19
C1	EA032	7.70	8.40	10.60	1.80	155	100	95	0.06	0.35	0.06	0.19	0.06	0.25
C2	EA032	7.70	8.40	10.60	1.80	155	100	95	0.06	0.35	0.06	0.19	0.06	0.25
D1	EA031	10.00	10.80	17.30	1.90	210	170	153	0.06	0.45	0.06	0.25	0.06	0.29
D2	EA031	10.00	10.80	17.30	1.90	210	170	153	0.06	0.45	0.06	0.25	0.06	0.29
E1	EA053	10.50	11.80	18.20	1.90	243	185		0.06	0.50	0.06	0.29	0.06	0.34
E2	EA053	10.50	11.80	18.20	1.90	243	185		0.06	0.50	0.06	0.29	0.06	0.34
G1	EA034	13.50	14.50	19.50	2.00	313			0.06	0.90	0.06	0.34	0.06	0.46
G2	EA034	13.50	14.50	19.50	2.00	313			0.06	0.90	0.06	0.34	0.06	0.46

#### Section code

Nominal size: M-H

(Dimensions are in mm).

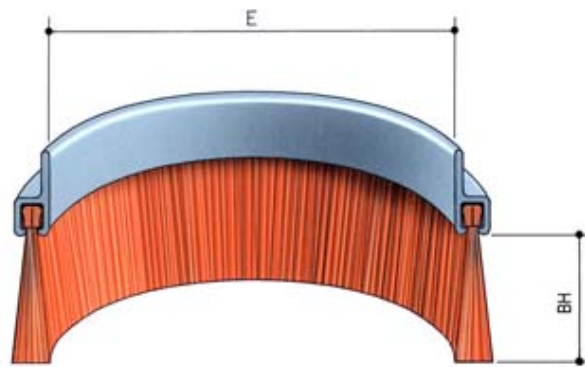
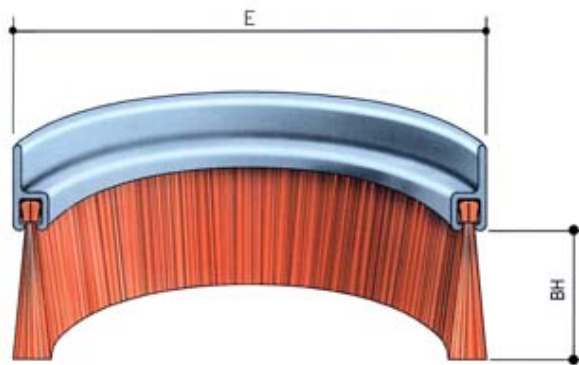
1: Electroplated mild steel (Galvanised)

2: Stainless steel (AISI 304)

Refer to page 6 for section dimensions.



<p><b>Type 44</b></p> <p>Brushstrip in carrier, cup shape complete ring or segment, internal flange</p>
<p><b>Type 45</b></p> <p>Brushstrip in carrier, cup shape complete ring or segment, external flange</p> <p>Manufactured to customers specification.</p> <p>Material section to suit application. Refer to page 48 for material properties.</p>



**How to specify Type 44 and Type 45 products**

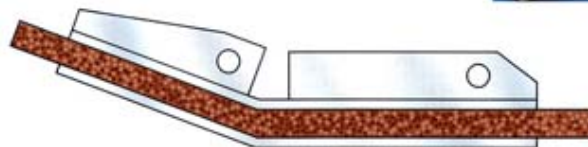
Section Code  
Filling material:  
Brush trim (BH):  
Diameter (E):  
Degree of segment:



### Custom Trimming and Forming

In addition to the conventional form shown on pages 6-19, brushstrip and carriers can be custom formed and trimmed to customer specification. Strips can be formed with compound radii or combinations of straights and formed sections can be used to follow complex profiles. Brushes may be chamfered, angled, castellated or trimmed to 90° corners.

Thousands of brushstrips are specially formed and castellated to fit neatly within the heads of vacuum cleaners. The brushstrip filaments glide across the floor raising the carpet fibres allowing the cleaner to collect the dust & dirt.



# *Rollerbrushes & Punched Knot*

*Kleeneze Sealtech's rollerbrush systems provide the necessary flexibility to suit a multitude of applications throughout industry.*

*Glass washing, food processing, surface treatment and media transfer are some of the uses of Kleeneze Sealtech's coiled rollerbrushes with versions available for hygienic and aggressive environments.*

*A complete range of rollerbrushes for the printing industry is available, developed from a specialised knowledge of print dampening for almost any type of press. Additionally, we can supply rollerbrushes for cleaning, tensioning and all other areas of textile and paper processing.*



*Any conveyor system handling materials which may adhere to it requires cleaning, since the carry over will accumulate causing unnecessary damage. Kleeneze Sealtech's straight or helical rollerbrushes offer effective cleaning and low maintenance. The well proven design is incorporated into the Kleeneze Sealtech powered conveyor cleaner used throughout the world.*

*Kleeneze Sealtech's modular rollerbrush systems offer economy and versatility. Use as few or as many modules as you need to make up your required brushface and replace the worn sections only when necessary.*

*Rollerbrushes are manufactured by spiralling straight brushstrip to form close rings giving the appearance of a solid brush face. Soft but robust filaments can be used when the brush is used to maintain tension on a delicate material. The large surface area spreads the load preventing ripping and damage.*

***"We use Kleeneze Sealtech Rollerbrushes to clean the surface of sheet glass prior to double glazing assembly. Soft but hardwearing filaments are ideal to ensure the glass is washed thoroughly even on specialist coated products."***

**Atlantic Machinery, Leicestershire**

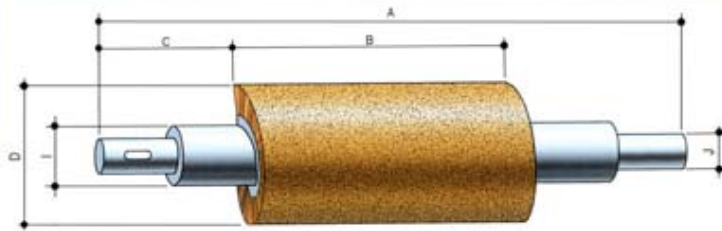
## Coiled Strip Rollerbrush

Manufactured specifically to suit customer requirements, in either a close coil or extended formation, depending on the application. The brushes can be supplied as complete assemblies or fitted directly onto a customer's roller core. The full range of synthetic natural or metallic filling materials are available; see page 48 for material properties.

### Type 41

#### Close coil strip rollerbrush

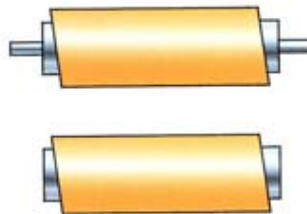
Manufactured to customer specification, RH or LH coil. Helical wound brushstrip mounted on a solid or tubular core with journals or bushes each end.



#### How to Specify Type 41 products

Section code:  
Filling material:  
Shaft material:  
Overall length (A):  
Brushface (B):  
Brush position (C):  
Brush diameter (D):  
Shaft diameter (I):  
Shaft end detail (J):

#### Fill configurations



Full brushface for uniform brushing of surface. Low to high density fill depending on product type.

Brushes can be fitted either on to shaft or tubular core as shown.

Profiled trims can be provided to work against irregular surfaces.

## Special Manufacture

BRUSHES SECTION CODE	DIMENSIONS AND TOLERANCES				FILLING MATERIALS						
	SECTION DIMENSIONS		SHAFT DIMENSIONS		BRUSH DIAMETER	SYNTHETIC		STEEL WIRE		PHOS. BRONZE NICKEL SILVER BRASS	
	Y	Z	I (Min)	A (Max)		(Min)	(Max)	(Min)	(Max)	(Min)	(Max)
M1	2.00	1.70	5.00	500.00		0.06	0.20	0.06		0.06	
M2	2.10	1.80	10.00	500.00		0.06	0.20	0.06		0.06	
A1	2.75	2.40	6.50	500.00	Up to 25	0.06	0.25	0.06	0.11	0.06	0.13
A2	2.70	2.50	10.00	500.00	±0.25	0.06	0.25	0.06	0.11	0.06	0.13
B1	3.85	3.80	9.50	500.00		0.06	0.30	0.06	0.13	0.06	0.19
B2	4.00	3.70	12.50	500.00	26 - 130	0.06	0.30	0.06	0.13	0.06	0.19
C1	4.95	4.55	12.50	750.00	±1.00	0.06	0.35	0.06	0.19	0.06	0.25
C2	5.05	4.60	19.00	750.00		0.06	0.35	0.06	0.19	0.06	0.25
D1	6.50	6.10	22.00	1000.00	131 - 300	0.06	0.45	0.06	0.25	0.06	0.29
D2	6.35	6.10	25.00	1000.00	±1.50	0.06	0.45	0.06	0.25	0.06	0.29
E1	7.80	6.65	32.00	1500.00		0.06	0.50	0.06	0.29	0.06	0.34
E2	7.80	6.80	38.00	1500.00		0.06	0.50	0.06	0.29	0.06	0.34
G1	9.35	8.90	44.50	1500.00		0.06	0.90	0.06	0.34	0.06	0.46
G2	9.45	8.75	51.00	2000.00	301 - 500	0.06	0.90	0.06	0.34	0.06	0.46
H1	12.15	11.75	76.00	3000.00		0.06	1.40	0.06	0.46	0.06	0.56
H2	12.15	11.50	89.00	4000.00		0.06	1.40	0.06	0.46	0.06	0.56

#### Section code

Nominal size M-H

- 1: Electroplated mild steel (Galvanised)
- 2: Stainless steel (AISI 304)

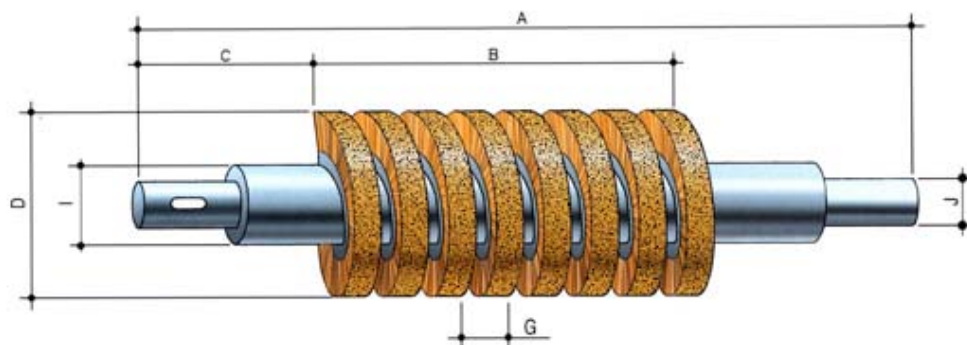
Refer to page 6 for section dimensions.

#### Length

Max length dimensions quoted are for min shaft diameter shown. (Dimensions are in mm).

17

Refer to page 17 for close coils which can also be supplied with no shaft.

**Type 42****Extended coil strip rollerbrush**

Manufactured to customer specifications RH or LH coil. Helical wound brushstrip mounted on a solid or tubular core with journals or bushes each end.

Pitched brushface suitable for light to aggressive operation.

**How to Specify Type 42 products**

Section code:  
Filling material:  
Shaft material:  
Overall length (A):  
Brushface (B):  
Brush position (C):  
Brush diameter (D):  
Pitch of coil (G):  
Shaft diameter (I):  
Shaft end detail (J):

**Fill configurations**

**Left hand helical pitch brushface** for uniform brushing towards the left. Mounted on shaft with journal ends.



**Right hand helical pitch brushface** for uniform brushing towards the right. Mounted on shaft with journal ends.



**Chevron brushface** for uniform brushing from the centre outwards. Mounted on shaft with journal ends.



**Left hand helical pitch brushface** for uniform brushing towards the left. Mounted on tubular core.



**Right hand helical pitch brushface** for uniform brushing towards the right. Mounted on tubular core.



**Chevron brushface** for uniform brushing from the centre outwards. Mounted on tubular core.

**16**

Refer to page 16 for extended coils which can also be supplied with no shaft.

**No matter how unusual or straight forward your company's brush requirements may be, our specialists will be delighted to advise you on your optimum solution.**

We can help you find the solution.  
For free advice call us **now** on:  
**0117 947 5149**

A close coil rollerbrush manufactured from strong wire, used in surface finishing to remove rust or burrs. When part of production machinery a rollerbrush can give an even surface finish across a large area.

## Axial and Helical Strip Rollerbrushes

Manufactured to customers specifications these rollerbrushes are available in two configurations, mounted either axially or helically twisted around the roller core.

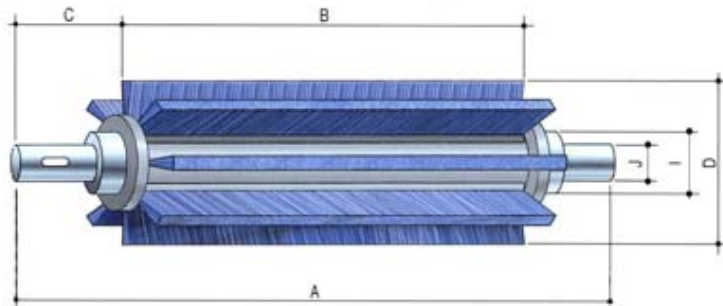
Particularly suited to conveyor cleaning the open brush construction helps prevent clogging which may occur with solid type cleaners.

Simple assembly enables easy replacement of the brushstrip without dismantling the whole roller assembly.

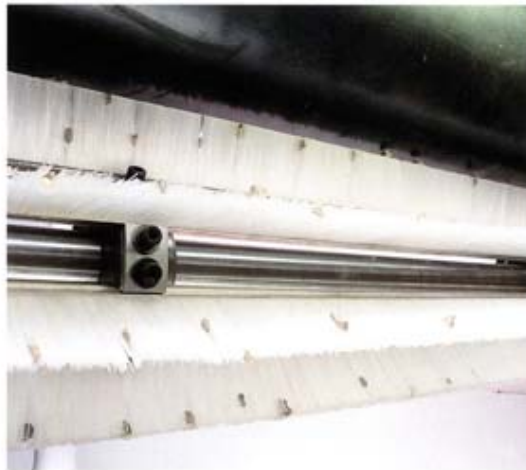
### Type 38

#### Axial Strip Rollerbrushes

Brushstrips mounted axially around the roller core. Available in a range of synthetic, natural or metallic filling materials, to suit every application, see page 48 for material properties.



**How to Specify Type 38 products**  
Type number:  
Filling material:  
Shaft material:  
Overall length (A):  
Brushface (B):  
Brush position (C):  
Brush diameter (D):  
Shaft diameter (I):  
Shaft end detail (J):



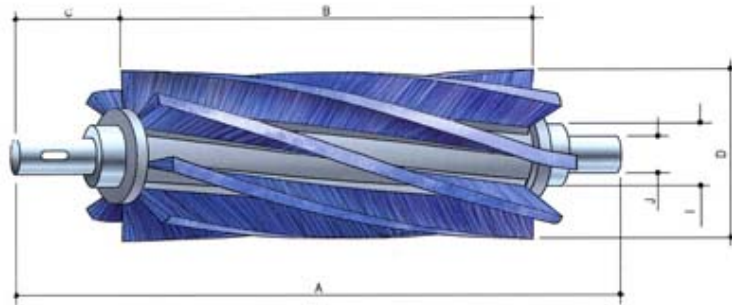
**No matter how unusual or straight forward your company's brush requirements may be, our specialists will be delighted to advise you on your optimum solution.**

Large Rollerbrushes can be fitted independently or as an integral part of the production process, and many processes involve moving conveyor belts. By fitting a rollerbrush close to the underside of the conveyor belt, product can easily be brushed off leaving the belt clean. The fill material is carefully selected according to each individual application. This method of continuous cleaning is suitable for rubber or fabric conveyor belts. Preventing a build up of deposits such as plaster, coal, or sand can increase the life of a conveyor belt and reduce breakdowns.

### Type 55

#### Helical form strip rollerbrush

Brushstrips mounted helically around the roller core. Available in a range of synthetic, natural or metallic filling materials, to suit every application, see page 48 for material properties.



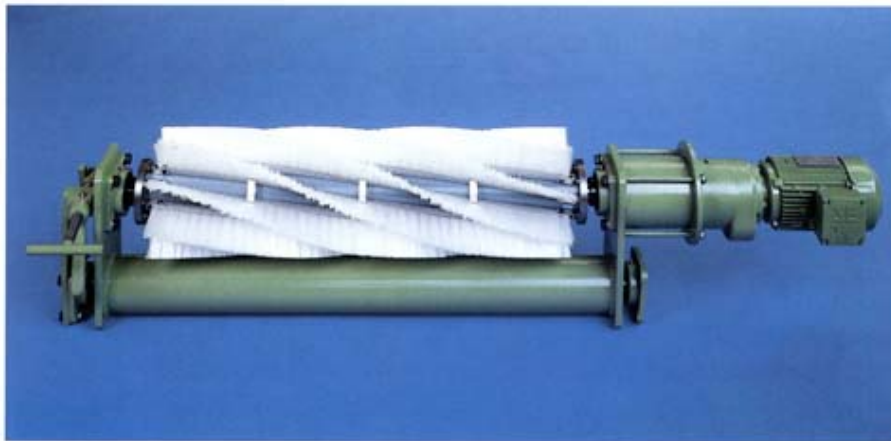
**How to specify Type 55 products**  
 Type number  
 Filling material  
 Shaft material  
 Overall length (A):  
 Brushface (B):  
 Brush position (C):  
 Brush diameter (D):  
 Shaft diameter (I):  
 Shaft end detail (J):  
 RH or LH Helix.

We can help you find the solution.  
 For free advice call us now on:  
**000 0117 947 5149**

### Special Manufacture

TYPE	ROLLERBRUSH DIMENSIONS				STRIPS AROUND	FILLING MATERIALS			
	BRUSH DIAMETER		BRUSHFACE			SYNTHETIC		STEEL WIRE	
	D (Min)	D (Max)	B (Min)	B (Max)		(Min)	(Max)	(Min)	(Max)
3806	150.00	200.00	150.00	2000.00	6	0.06	2.00	0.06	0.56
3808	200.00	300.00	150.00	2000.00	8	0.06	2.00	0.06	0.56
5506	150.00	200.00	550.00	2500.00	6	0.06	2.00	0.06	0.56
5508	200.00	250.00	550.00	4000.00	8	0.06	2.00	0.06	0.56
5512	220.00	250.00	550.00	4000.00	12	0.06	2.00	0.06	0.56

(Measurements are in mm)



The Motorised Conveyor Belt Cleaner can be fitted below a moving belt and removes all types of residues and provides continuous cleaning. The brush configuration determines the direction in which the waste material is deposited.

## Tufted Rollerbrushes

Constructed using machine fastened or hand drawn tufts for assembly on to a roller core, complete with axle journals or bushings. Tufted rollerbrushes can be manufactured in low to high density brushfaces in a range of tuft sizes filled with synthetic, natural, metallic or mixed materials, to suit every application. See page 46 for material properties.

### Type 82

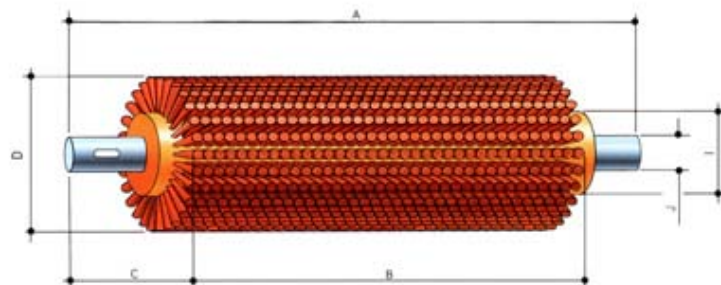
#### Tufted Rollerbrush

Manufactured to customer specification fitted onto a various range of tubular cores from nylon, PVC, polypropylene, polyethylene, wood, aluminium, steel. Assemblies manufactured complete or fitted to customer's own core.



#### How to Specify Type 82 products

Filling material:  
Fill configuration:  
Core material:  
Overall length (A):  
Brushface (B):  
Brush position (C):  
Brush diameter (D):  
Shaft diameter (I):  
Shaft end detail (J):



#### Fill configurations



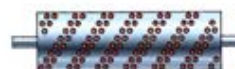
Full brushface for uniform brushing of surface. Low to high density fill depending on product type.



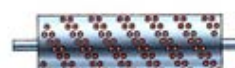
Staggered pitch.



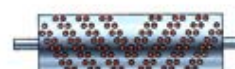
Axial open brushface for media removal, open construction to prevent clogging.



Left hand helical pitch brushface for uniform brushing towards the left.



Right hand helical pitch brushface for uniform brushing towards the right.



Chevron brushface for uniform brushing from the centre outwards.

### Special Manufacture

TYPE	ROLLERBRUSH DIMENSIONS					FILLING MATERIALS					
	DIAMETER				LENGTH A	SYNTHETIC		STEEL WIRE		PHOS. BRONZE NICKEL SILVER BRASS	
	D (Min)	D (Max)	I (Min)	I (Max)		(Min)	(Max)	(Min)	(Max)	(Min)	(Max)
82	30.00	500.00	18.00	355.00	6000.00	0.06	1.40	0.06	0.46	0.06	0.56



## Tufted Rollerbrushes: Modular System

Construction based on a system of interlocking modules on a suitable core. Tufts of filaments are machine fastened to the modules which feature trapezoidal teeth to produce a continuous brushface. The light weight reinforced polypropylene core modules enable easy replacement of damaged or worn sections with minimal delay and cost. Available in the same range as filling materials and configurations as the standard tufted rollerbrush range.

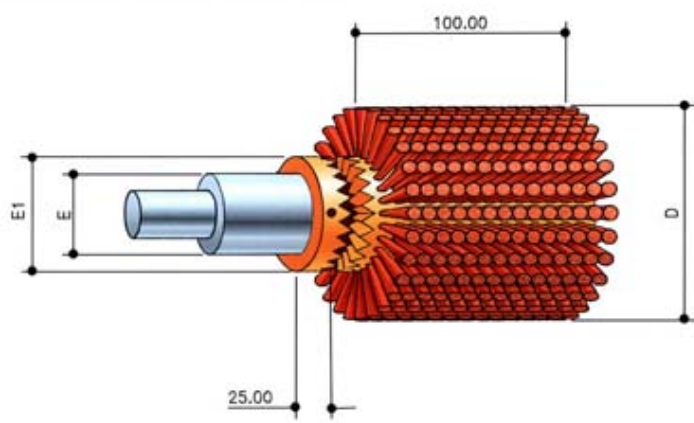


**Type 81  
Modular System**

The range of options is extensive. In the seven standard core diameters and three fill density variations: low, medium and high. All these are available in each size making a total of 21 standard cores to choose from.



**How to specify  
Type 81 products**  
Type number:  
Locking collar type:  
Filling material:  
Fill configuration:  
Fill density:  
Brush diameter (D):  
Core diameter (E):



TYPE	BRUSH DIAMETER		CORE DIAMETER		LENGTH A	FILL DENSITY	SYNTHETIC NATURAL METALLIC OR MIXED
	D (Min)	D (Max)	E	E1			
8120	40.00	160.00	20.00	32.00			
8125	54.00	175.00	25.00	46.00			
8135	66.00	275.00	35.00	58.00	200	Low	Most materials as described on page 48
8140	74.00	290.00	40.00	66.00	Up to	Medium or	
8160	94.00	305.00	60.00	86.00	6000	High	
8175	110.00	320.00	75.00	102.00			
8100	135.00	345.00	100.00	127.00			

**Features:-**

- Seven standard core diameters
- Three brushface densities
- Various tuft patterns
- Three locking collar types:-  
Standard 25mm collar with trapezoidal teeth.  
Plain narrow locking collars where space is restricted.  
Non standard overall lengths achieved by converting an end module into a locking collar.



## Lath & Disc Brushes

Lath brushes provide a useful variation to brushstrip because they are made using plastic or wooden strips with filaments punched directly into the "lath" or "stock".

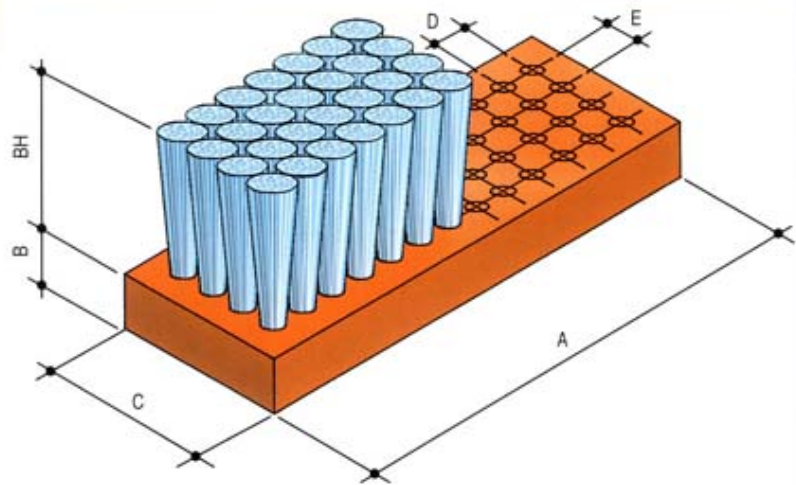
The strips can be of varying widths or lengths creating a wider surface area to suit applications difficult to achieve with brushstrip.

Disc brushes are manufactured by a similar method, the filaments are punched into a disc core in a circular pattern.

Lath brushes are particularly suitable for the safe transfer of large and delicate sheets of material such as glass. The glass industry uses these brushes extensively to move large sheets of glass from one process to another, by creating a network of brushes which support and protect the large and previously unmanageable sheets. Laths therefore have multiple benefits within this type of industry such as the avoidance of scratching and damage, manoeuvrability, increased safety by reduced man handling.

Lath brushes can also be used for stripping materials before cleaning, as cushions on CNC punching machines for noise reduction and protection.

There are several standard types available (see illustrations below) but if these do not suit your application, we are able to design and manufacture specifically for your requirements. All you need to do is contact our technical hotline.



### How to Specify Type 88 products

Filling Material:  
Stock Material:  
Overall length (A):  
Stock Thickness(B):  
Width (C):  
Pitch (D):  
Pitch (E):  
Knot Diameter:  
Brush Height (BH):

We can help you find the solution.  
For free advice call us **now** on:  
**000 0117 947 5149**



## Disc Brushes

We have made over 2500 different kinds of disc brushes to suit a huge variety of applications. We offer a design & manufacture service to ensure that you will always have the correct brush for the job.

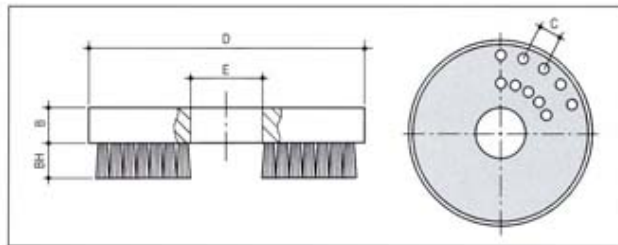
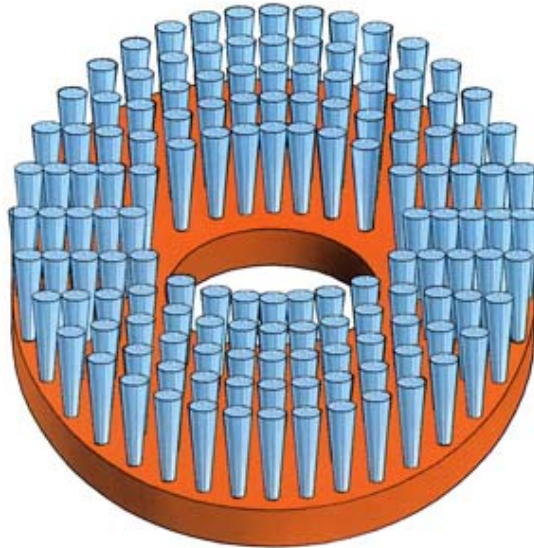
The filaments are punched into the disc in a similar way to lath brushes. For very aggressive applications the tuft can be glued into the disc for additional security.

There is a range of disc cores such as metal, wood or plastic and a wide choice of different filaments. These range from tough abrasive material for deburring and finishing to soft water resistant synthetics used in car washes.



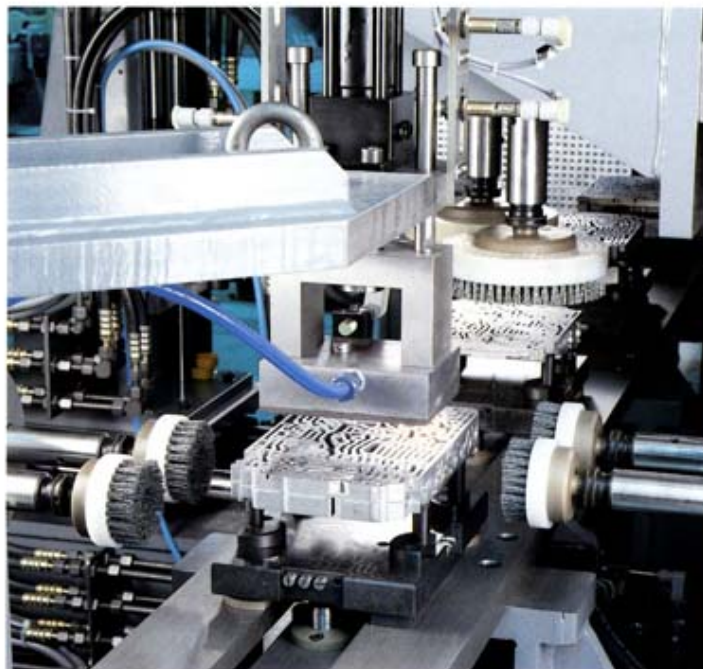
### How to Specify Type 89 products

Filling Material:  
Stock Material:  
Inside Diameter (E):  
Outside Diameter (D):  
Thickness of Stock (B):  
Knot Diameter:  
Brush Height (BH):  
Pitch: (C)  
Knot Pattern:  
(No Row around x No  
of Knots per Row)



Disc Brushes are used as wheel cleaners by many of the leading manufacturers of car wash plants.

**No matter how unusual or straight forward your company's brush requirements may be, our specialists will be delighted to advise you on your optimum solution.**



# *Wire & Abrasive Brushes*

*Burrs and rough surfaces created during the manufacturing process can cause problems when assembling or using machined components. The effective removal of burrs, scale, rust or improvement to surface finish is essential to achieve today's high levels of build quality.*

*These are just a few of the applications for wire and abrasive brushes. Kleeneze Sealtech's complete range of standard and special brushes can provide the correct solution for your application.*

*The extensive range is manufactured with various types of filament such as steel wire, stainless wire, abrasive nylon or brass wire to allow you a wide choice for the multitude of uses.*



*The following fill materials are available:*

*Ultra and Plus-Ultra – tough hardwearing twisted wire knots.*

*Delta – wire embedded in flexible plastic giving very aggressive action.*

*Alpha – abrasive nylon filaments.*

*Record – crimped hardened wire.*

*Multicord – cable type wire for extra aggression.*

*The range is available in various forms such as Cup brushes, Shaft Mounted, Single Section Wheel and Internal brushes. The following pages provide further information to select the correct brush for each application.*

***“We use Kleeneze Sealtech wire brushes to strip electrical wire in preparation for use in our electronic components. The brushes were made exactly to our specifications and provide a quick and effective solution to what was a slow and labour intensive process.”***

**Sony Manufacturing Co. UK**

## Rotary wire and abrasive brushes

Kleeneze Sealtech is able to offer probably the most comprehensive range of wire and abrasive rotary brushes available.

Constructed using a variety of filaments and configurations, we can provide a solution to virtually all brush finishing requirements.

This section provides technical information on the use and application of our rotary wire and abrasive brush range. Our technical engineers are always available to advise on particular applications.



A cup brush and angle grinder at work.

### Fill types and application



Multicord construction circular brush

#### RECORD

Steel wire, crimped, available in 3 grades, 0.15mm - 0.50mm diameter.

- Patented crimped steel wire, tensile strength 1800/200N/mm<sup>2</sup>.
- Stainless steel, acid resistant wire, tensile strength 1600/1800N/mm<sup>2</sup>.
- Tempered steel wire, tensile strength 2400/2600N/mm<sup>2</sup>.

Applications: de-scaling, smoothing, matt finishing, cleaning, deburring.

#### MULTICORD

Brass plated steel wire, crimped and tempered, 0.15mm - 0.27mm diameter. Tensile strength 2400/2600N/mm<sup>2</sup>.

Applications: de-scaling, roughing rubber, graining of wood.

#### ULTRA

Steel wire, straight, twisted, 0.35mm - 0.80mm diameter, available in 2 grades:

- Steel wire, oil hardened, tensile strength 2000N/mm<sup>2</sup>.
- Stainless steel wire, tensile strength 1800N/mm<sup>2</sup>.

Applications: brushing welds, de-scaling, cleaning castings, deburring.

#### PLUS ULTRA

Steel wire, straight, twisted, oil hardened, 0.35mm - 0.80mm diameter. High tensile strength 2400/2600N/mm<sup>2</sup>.

Applications: brushing welds, de-scaling, cleaning castings, deburring.

#### DELTA

Brass plated steel wire, crimped, 0.30mm diameter, embedded in elastic synthetic material. Tensile strength 2100/2300N/mm<sup>2</sup>.

Applications: deburring, cleaning sheet metal, edge brushing.

#### ALPHA

Abrasive impregnated nylon monofilament available in 2 types and various grades:

- Silicone carbide (SiC), 80 - 500 grit
- Aluminium oxide (Al<sub>2</sub>O<sub>3</sub>), 80 - 500 grit.

Applications: deburring steel, non ferrous metals and plastics.

**Full details on all these products are available on request – simply call our customer services department.**



### Single section brushes

Designed to process narrow work pieces, single section brushes combine absolute precision with reliability.

Brushes can be used individually or mounted adjacently to build up to any brush face required.

#### Application

#### RECORD, MULTICORD,

Removing paint and other coatings, including rust and scale, from all types of steel work.

Removing oxide layers from stainless steel and non-ferrous metals.

Creating metallically clean surfaces, matt finishing metal surfaces and deburring castings.

#### ULTRA, PLUS ULTRA, DELTA

Removing excess rubber from metal to rubber bonded parts.

Removing adhesive residue, scale, rust and paint from metal surfaces.

Cleaning welds.

#### ALPHA

Deburring castings, gears and other steel and non-ferrous components.

Single section brushes are available in a large range of standard sizes and fill materials.

Full details on request.



### Circular brushes

These brushes can be easily mounted on a variety of core designs to produce any brushface width with the maximum fill density.

For use on benches or hand held machines.

#### Application

#### RECORD,

Removal of paint and other coatings, including rust and scale.

Roughening and deburring and polishing.

#### ULTRA, PLUS ULTRA

Aggressive surface treatment, deburring and removal of scale.

Weld preparation.

Circular brushes are available in a large range of standard sizes and fill materials.

Full details on request.



### Cup brushes

Available with plain or threaded bore for use on bench machines, angle and pneumatic grinders. During rotation the fill material splays out to transform the large number of abrasive tips into an effective cutting tool for maximum efficiency on flat and awkward surfaces.

#### Application

#### RECORD

Removal of paint and other coatings, including rust and scale.

#### ULTRA, PLUS ULTRA

Aggressive surface treatment for removal of paint, scale, cleaning welds and fabricated steelwork.

#### ALPHA, DELTA

#### Deburring

Cup brushes are available in a large range of standard sizes and fill materials.



We can help you find the solution.  
For free advice call us now on:  
**0117 947 5149**



### Shaft mounted circular brushes

These are the most versatile brushes and can be used in almost any application.

The shaft provides a simple fixing arrangement to any portable or automatic machinery.

These brushes are ideal for use in power drills, on flexible shafts, in pneumatic grinders and bench machines.

#### *Application*

#### **RECORD, MULTICORD**

For smoothing, trimming of castings joints, light deburring and for the removal of corrosion and paint.

#### **MULTICORD SPECIAL, RECORD SPECIAL**

Aggressive brushing for hard to reach areas such as internal edges, grooves and gaps particularly on vehicle bodywork.

#### **DELTA, ULTRA**

For working on weld seams and spot welds and the removal of hard scale.

#### **ALPHA**

For many kinds of deburring work and for hand held or automatic machines.



### Shaft mounted cup brushes

Shaft mounted cup brushes are available with crimped wires in various qualities. This makes the range of brushes ideal for working on large surfaces where the finish is important.

These brushes may be attached to most electrical and pneumatic tools.

#### *Application*

#### **RECORD, ALPHA**

For the removal of rust, paint and other surface contaminants to produce a clean surface finish on all types of metal.



### End brushes

End brushes are produced from crimped wire in various qualities. Their applications are endless from deburring drilled holes to a more aggressive action of the removal of scale.

With the Plus-Ultra twist knot construction and oil hardened wire when run at high speeds the material splays out to form a shaft mounted circular brush.

#### *Application*

#### **RECORD, ALPHA**

For the removal of rust, paint and primer, and the cleaning of moulds and castings, also for the production of matt and satin finishes.

#### **MULTICORD, DELTRA, PLUS-ULTRA**

For working on weld seams, spot welds and the removal of scale. Also appropriate for the removal of tough, thick and sticky compounds and heavy duty application such as the removal of stubborn corrosion.



*Removing under seal with a ultra shaft mounted circular brush.*





### Bevel brushes

Bevel brushes are an ingenious combination of circular and cup brushes. These brushes have been developed specially for work in hard-to-reach places such as edges and corners.

Available with thread to fit off-hand and large angle grinders.

#### Application

**RECORD, MULTICORD, ULTRA, PLUS-ULTRA**

Heavy duty work such as the removal of paint, scale and corrosion of all kinds. Suitable for work on internal corners.



### Interior brushes

The twisted core wire of the interior brush form a high density single spiral fill pattern for effective deburring of internal surfaces. Interior brushes are suitable for use with hand power tools and automatic machines.

#### Fill types

ANA – ANDERLON abrasive filaments, aluminiumoxide grit, straight.

ANS – ANDERLON abrasive filaments, silicon-carbide grit, crimped.

SUP – Steel wire, hardened, straight.

#### Application

Deburring of O rings recesses and drilled cross holes and for cleaning, smoothing and the removal of rust.



### Tube cleaning brushes

For aggressive internal cleaning, tube cleaning brushes feature a strong four core twisted wire stem and 1/2" whitworth male threaded connector. For hand use with extension rods or power driven flexible shaft and bench machines.

#### Fill types

OSG – steel wire, hardened straight.

#### Application

Specially designed for boiler tube cleaning for the removal of rust and scale.



**Full details on all these products are available on request – simply call our customer services department.**

We can help you find the solution.  
For free advice call us now on:  
**0117 947 5149**

# *Antistatic Brushes*

*As more synthetic materials are used in the world the generation of static electricity is becoming more prevalent. A person may get a mild shock from static electricity getting out of a car. In a manufacturing process the generation and accumulation of static energy may amount to several kilovolts. This not only affects the quality of output but may also damage electronic systems or cause a fire.*

*Our range of antistatic brushstrip – Statstrip™ is manufactured using either stainless steel yarn or carbon fibre. A length of Statstrip™ can be installed touching or slightly above a production process and will constantly discharge the static energy into a neutral conductor such as a machine frame. Statstrip™ is particularly effective on flat objects which makes it the ideal solution for packing machines using plastic film or paper, photocopiers and conveyor systems.*



*A further problem caused by static electricity is the attraction of dust, which is compounded by the fact that conventional methods of removal only generate additional static charges.*

*Ostrich feather rollerbrushes use this principle to remove dirt and dust. First the brush gently sweeps away particles without causing damage to the delicate surface. Then the charge generated by the cleaning action is retained on the feathers, which attracts the dust onto the feather brushes rather than on to the work piece.*

*"We fit Kleeneze Sealtech goat hair brushstrip in our postal machines, to moisten envelopes prior to sealing. The natural qualities of the hair absorb and retain water unlike synthetic filaments, which makes them the ideal product for our application."*

**Neopost Ltd.**

## Statstrip

The generation of static electricity is a problem to many sectors of industry particularly those processing paper, film and other synthetic materials.

Statstrip is a passive static eliminator designed to reduce static build up. It has been designed as a cost effective solution that can be easily fitted to most process equipment.

Kleeneze Sealtech's range of anti-static brushes is backed up by a team of field engineers offering free advice and assistance.



Type 80 Statstrip used to reduce static build up on paper processing.



Statstrip Type 80



Statstrip Type AB20

### Type 80

#### Statstrip

Available in stock sizes or manufactured to customer specification, including fixing holes, forming and special machining.

#### Filling material

Stainless steel AISI316

#### Backing tape

Aluminium

### Type AB20

#### Statstrip

Available in stock sizes or manufactured to customer specification, including fixing holes, forming and special machining.

#### Filling material

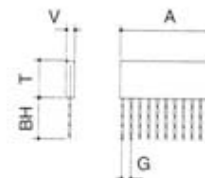
Carbon fibre

#### Backing tape

Aluminium

### Standard and Special Manufacture

TYPE	BACKING TAPE DIMENSIONS		STANDARD PITCH G	OVERALL TRIM			OVERALL LENGTH		
				SPECIAL					
	height T	width V		STANDARD BH	BH (Min)	(Max)	A (Standard)	A (Min)	A (Max)
80	13	2	2	9	6	25	1000	10	2000
80	8	2	2		6	25	1000	10	2000
AB 20	10	3	10	12	9	28	2000	10	2000



Number of passes under Statstrip	PVC	Paper	Cellophane	Metal
1	2.66	0.80	-	0
2	1.95	0.35	-	-
3	0.80	0.09	0	-
10	0.27	-	-	-

**Table 1**  
Shows static charge density remaining after passing over various substrates (Statstrip touching).  
Units -  $\mu\text{C}/\text{m}^2$

Anti-static brushes are installed as close to the source of the electrostatic charge as possible. The static is discharged through the aluminium backing to earth through the process equipment frame. It is not necessary to touch the substrate in order to be effective (see tables 1 and 2). A clearance of 1-2mm is often sufficient.

Number of passes under Statstrip	PVC	Paper	Cellophane	Metal
1	3.45	1.24	-	-
2	2.83	0.97	-	-
3	2.39	0.80	1.77	0.44
10	1.69	0.62	-	-

**Table 2**  
Statstrip not touching substrate shows static charge remaining after passing over various substrate (Statstrip 5mm above substrate).  
Units -  $\mu\text{C}/\text{m}^2$

**Note:**  
The figures remain constant if initial charge on the substrate is increased or decreased.  
Laboratory test carried out at 20°C with 50% R.H.

We can help you find the solution.  
For free advice call us **now** on:  
**000 0117 947 5149**

**For further details of these products simply call our customer services department.**

## Ostrich Feather Brushes

Rotary ostrich feather brushes remove dust from work surfaces by using the intrinsic electrostatic charge within the feather.

The resulting ionised dust remains on the feather until removed by a suitable extraction system. Ostrich feather brushes are ideal where dust needs to be removed from sensitive surfaces using particularly gentle action.



The feathers are obtained either by natural shedding or by special plucking without harm to the birds.



Ostrich feather rollerbrushes are ideal for use in a car plant. The car bodies have to be dusted before painting, to remove every minute particle of dust from the surface, to ensure a perfect finish.

# Technical Information

*There is a wide range of specialist filaments available, which may be more suited to an application outside our standard range. To ensure brushstrip achieves the highest level of performance, the selection of filling material is of paramount importance. Technical data on characteristics such as bend recovery, water absorption and resistance to chemicals are detailed in the following chapter.*

*A brush used in wet or humid conditions requires a filament such as polyester or polypropylene, that does not become soft in water or detergents. For a brush exposed to high temperatures, a metallic or natural fibre may be the best solution.*

*Wire is primarily used for abrasive applications where the hardness and cutting ability is of primary importance. Hair from goats and horses is ideal in contact with delicate surfaces that are prone to scratching. Goat hair is particularly selected for use where its shine and soft touch compliment luxury surroundings.*



*Some synthetic filaments can be crimped to increase density and therefore surface area, or flagged (splitting ends of each filament). The latter technique is used on Escalator Safetystrip™ to provide a soft but firm surface, that gently guides people away from the edges of escalators.*

*Material characteristics are explained in the following pages. Details on the most commonly used filaments, as well as specialist filaments are included. Our technical department or representatives are always available to offer their free expert advice.*

*"We use Kleeneze Sealtech brushstrip to seal the gear shift housing which we supply to the manufacturer of a top of the range executive car. Kleeneze Sealtech's technical department used it's experience to recommend the ideal filament for the application."*

**Excel Timbalex.**

## Materials: General Characteristics

Having selected the type of brush required, there are number of factors to consider in order to specify the optimum fill material. We describe below, the most commonly used fill materials although many others are available on request.

### Synthetic filaments

#### Nylon 6.0

A durable filament with good recovery, temperature stability and abrasion resistance. Available straight or crimped, 0.15 - 2.00mm diameter, colours on request.

#### Nylon 6.6

A high quality filament with a higher stiffness, recovery and abrasion resistance than type 6.0. Available straight or crimped, 0.10 - 2.00mm diameter, colours on request. Also available flagged.

#### Nylon 6.12

A high quality filament having excellent bend recovery and abrasion resistance. Its low moisture absorption makes it an excellent filament for wet applications. Available straight or crimped, 0.06 - 2.00mm diameter, colours on request.

#### Polyester

An excellent filament with good stiffness and recovery. Particularly suitable for wet applications. Available straight or crimped, 0.15mm - 2.00mm diameter, colours on request.

#### Polypropylene

Good chemical resistance with a higher wet stiffness than nylon. Good bend recovery but will take a set more easily than other materials. Available straight or crimped, 0.15mm - 2.00mm, colours on request.

#### Polyethylene

A soft and durable material suitable for applications where abrasion is to be avoided. Available in round or cross section, 0.35mm - 1.20mm, colours on request.

#### PVC

Economical material with a reasonable flex life, low friction resistance and no loss of stiffness in water. Available straight or crimped, 0.15mm - 1.50mm diameter, colours on request.

### Natural materials

#### Horsehair

Soft to medium stiffness with very good recovery and excellent set resistance. Available natural grey or black.

#### Bristle

Medium to hard stiffness with very good bend recovery and set resistance. Available natural grey or black.

#### Goat hair

Particularly soft material with very good bend recovery and set resistance. Available natural white or black.

#### Fibre

Stiff, coarse material with a good flicking action. Available natural white or grey.

#### Flex life



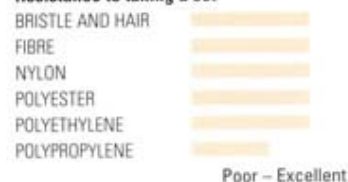
#### Retention of stiffness in water



#### Flicking action



#### Resistance to taking a set



#### Resistance to sunlight



#### Abrasion resistance





## Special Purpose Materials

In addition, we are able to offer a range of materials developed for specific applications. Our technical team are always available to advise on the selection of materials for your application.

### Heat stabilised nylon 6.6

Suitable for use in environments up to 120°C. High Temperature Nylon 6.6 can be used for dry working conditions up to 173°C.

### Conductive nylon 6.6

Combines the properties of standard nylon 6.6 with an electrically conductive coating suffused onto the surface which makes the material suitable for anti-static applications.

Average electrical resistance:

7.8 x 103 ohms/cm\*

Available straight, 0.20mm - 0.65mm diameter, black.

\* Depending on filament diameter.

### Fire retardant nylon 6.6

A flame retardant filament which has all the characteristics of nylon 6.6, but in addition, is immediately self-extinguishing on ignition and does not drip. Available straight or crimped, 0.25mm - 2.00mm diameter, black.

### Acrylic conductive filament

An organic conductive filament with excellent wear resistance and conductivity for anti-static applications.

Electrical resistance:

10-1 ohms/cm

Available straight, 0.06mm diameter, natural.

### Abrasive nylon

A nylon filament impregnated with either silicone carbide (SIC) or aluminium oxide (ALD) grit for metal polishing, deburring and cleaning of various materials. Abrasive brushes will not load up like a pad and offer good fatigue and chemical resistance.

800 - 60 grit size (SIC) or (ALD),  
0.20mm - 2.00mm diameter, crimped.

## Metallics

### Hardened and tempered mild steel wire

Available crimped, 0.06 - 0.56mm diameter.

### Carbon steel wire

Available crimped, 0.06 - 0.56mm diameter.

### Stainless steel wire

AISI304, available crimped,  
0.06mm - 0.56mm diameter.

### Brass wire

70/30 type, available crimped,  
0.06mm - 0.56mm diameter

### Nickel silver

62/18 type, available crimped  
0.06mm - 0.56mm diameter

### Phosphor bronze

95/5 type, available crimped,  
0.06mm - 0.56mm diameter.

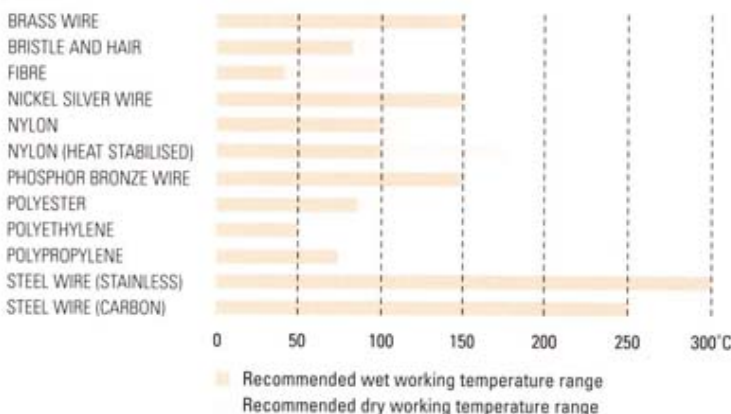
## Anti-microbial

Available in nylon 6, 6.12, polyester, polypropylene. Requires an aqueous environment to activate the anti-microbial properties. Ideal for use in the food industry as it inhibits the growth of bacteria.

## Tapered filaments

Available in ratios of 0.23mm/0.12mm, 0.30mm/0.20mm and 0.38mm/0.25mm. Make an excellent substitute for natural fibres, the range includes Synthetic Goat Hair™.

### Temperature Resistance







key:

- |                 |              |                   |
|-----------------|--------------|-------------------|
| 1 Polypropylene | 4 Penta      | 7 Mexican Fibre   |
| 2 Nylon         | 5 Goat Hair  | 8 Bristle         |
| 3 Polyester     | 6 Steel Wire | 9 Phosphor Bronze |

## How to Order

Within each chapter you will find both our Standard Range of products and our Bespoke, Special Manufactured items. All our standard products are normally in stock and can be delivered within a few days.

We will make all Specially Manufactured items from the information you supply for which we need clearly written details. Our Customer Service staff will guide you through the information in this catalogue and send you further details of our manufacturing capabilities. We will also prepare written quotations upon request.

If you need any help in selecting a suitable product or if you're unable to find what you are looking for in the catalogue, then our team of experienced technical representatives will be happy to visit you. They can discuss your requirements, make recommendations or suggest a suitable alternative.

### Note:

Our Standard Range uses black nylon filaments, but for Special Manufacture we can match any colour.

We can help you find the solution.  
For free advice call us **now** on:  
**0117 947 5149**

# *Door & Window Seals*

*Many people perceive that Kleeneze Sealtech's wide range of draughtproofing products "Superseal", only stop draughts. Superseal is a 98% effective seal against the movement of air, but it also stops dust, light, heat, cold, pests and noise. Fitting Superseal not only saves money on energy bills, but also dramatically increases comfort levels and is environmentally friendly by helping to reduce production of greenhouse gases.*



*Our wide range of products offers a solution for sealing any door or window, from domestic doors with a gap of 6mm, to commercial prestige doors, or a battered roller shutter door in the loading bay of a factory to huge hangar doors, where a gap of 200mm allows large quantities of cold air to enter the building.*

*The following pages show typical door illustrations and a selection of sealing products according to the width of the gap to be sealed.*

*"We use Kleeneze Sealtech brushstrip to stop draughts under doors and through letterboxes. It is also used in cavity wall insulation because it is a high quality product. We have used Kleeneze Sealtech seals for the past seven years and have appreciated the service and quality they provide. We have draughtproofed 50,000 homes using mainly Kleeneze Sealtech products."*

**Tyne Insulation Services, Tyne & Wear.**

# The Complete Sealing System...

*According to Department of Environment statistics, up to 15% of heat in the average home is lost through doors and windows. Obviously that will add up to 15% on the average heating bill.*

*Superseal is the most comprehensive range of seals available covering every conceivable domestic, commercial and industrial application.*

*Superseal offers an excellent and permanent investment for energy conservation and economy, providing up to 98% effective draught proofing for all types of doors and windows.*

*Approved by the British and other governments, Superseal is used extensively for military establishments, public buildings, private and local authority housing and energy conservation groups.*

*But stopping draughts is just one of a whole list of extra benefits to be gained by using Superseal:*

- reduces heat loss
- reduces noise levels
- seals against the intrusion of dust and dirt
- effectively seals against cold smoke, in the event of a fire.

*Supported by a nation-wide team of technical representatives and an advisory department at Bristol, Kleeneze Sealtech offers a complete service which includes surveying, specifying, design and manufacture.*

## **SUPERSEAL**

### Performance

Superseal products applicable to the draught strip performance standard B.S.7386: 1990 are independently tested and passed by the Building Services Research Association, an accredited NAMAS test facility.

# BSRIA



## Materials

Brushstrip edge and threshold seals are manufactured using Nylon 6 filaments providing all the performance reliability of the standard range.

Carriers are extruded aluminium 6063 T6 or rigid PVC, many of which incorporate an integral secondary seal to take up any unevenness of the frame.

Pile type and elastomeric seals are only manufactured in quality materials offering the best in efficiency and durability.

## Cutting

When cutting Superseal the cut end must be correctly resealed to avoid spillage of the nylon filaments.

### Apply the following procedure

Slide the brushstrip out of the carrier

Measure the required length, cut the carrier with a fine tooth saw and deburr.

Measure the required brushstrip length and cut with a pair of bolt croppers, or similar side action cutters, thus fully closing the end.

Slide the brushstrip back into the carrier and lightly crimp the carrier to secure the seal.

## Fixing

For fixing to the following materials

**To Steel Plate:** Plated screws.

**To Sheet Metal:** Aluminium pop rivets.

**To Timber:** Plated wood screws.

**To Masonry:** Use suitable plugs or fit a timber batten.

## How to use this section

We stock a range of brushstrip, pile and elastomeric seals which are suitable for sealing existing doors and windows.

Refer to the typical door illustration to select the type of Superseal according to the width of the gap to be sealed.

If you can't find what you are looking for call our customer services department.

We can help you find the solution.  
For free advice call us **now** on:  
**0117 947 5149**

## Air Leakage

Air Pressure Pa	Maximum Limit m <sup>3</sup> /hr/m	Seal Performance m <sup>3</sup> /hr/m
10	0.99	0.31
50	4.06	1.20
100	7.48	2.08

*Superseal Brushstrip three times exceeds the British Standard*

## Sustained Compression / Deflection

Temperature °C	Minimum Recovery Limit % Applied Deflection	Seal Recovery % Applied Deflection
-10	55	100
23	55	100
55	55	100

*Superseal Brushstrip twice exceeds the British Standard*

## Resistance to Wear

Mode of Action over 20,000 Cycles	Maximum Loss in Working Section (mm)	Seal Performance (mm)
Compression / Wiping	1.00	Less than 0.1
Wiping only	1.00	Less than 0.1

*Superseal Brushstrip 10 times exceeds the British Standard*

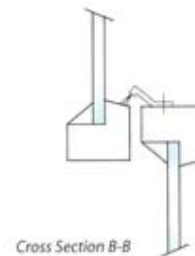
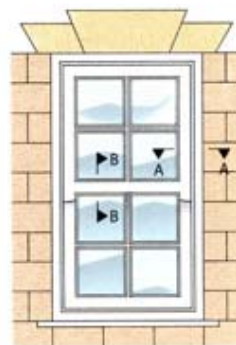


*Flexible filaments effectively sealing the contoured section of a roller shutter door.*

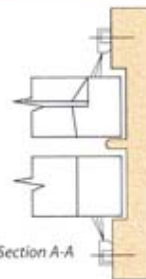
## Seals for Windows

Windows may seem to fit well but the gaps around them are responsible for a large proportion of domestic heat loss, which results in reduced room temperature. The Superseal™ range of domestic seals includes brush and pile products specially designed to seal timber and metal windows. They are supplied complete, in easily manageable lengths so they can be fitted in minutes with a few basic tools.

### Timber sash window



Cross Section B-B



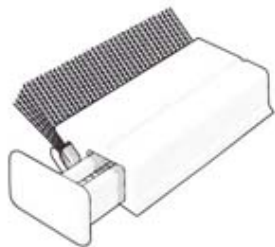
Cross Section A-A

#### Features

- Conforms to Draughtstrip Performance Standard B.S.7386:1990.
- Uneven surfaces, warping or seasonal movement are effectively sealed by the independent brush filaments.
- Excellent compression recovery
- Simple retro-fitting
- UV light resistant and rust free components.

68

Refer to page 68 for Compression Seals which are also another effective way to stop unwanted draughts.



Brushstrip seal, rigid plastic carrier with integral secondary seal. Complete with end cap.

**H612PV1462**

White carrier, white brush – length 2030mm

**H612PV4637**

White carrier, black brush – length 2030mm

**H612PV1464**

Brown carrier, black brush – length 2030mm



Brushstrip seal, profiled rigid plastic carrier.

**H612PV1631**

White carrier, white brush – length 2030mm



Long flange pile seal, rigid plastic carrier with integral secondary seal.

**H612PV8602AW**

White carrier, white pile – length 2030mm

**H612PV8602AG**

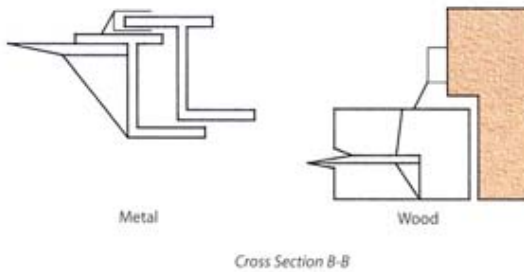
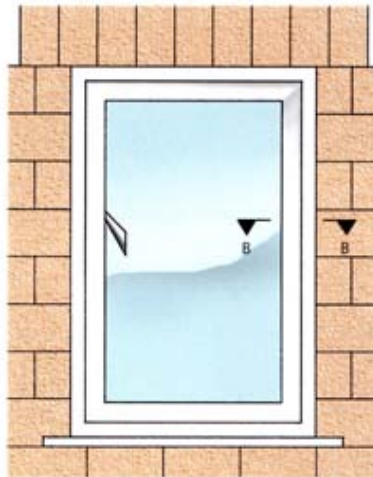
White carrier, grey pile – length 2030mm

**H612PV1603AB**

Brown carrier, brown pile – length 2030mm



## Timber or metal casement window

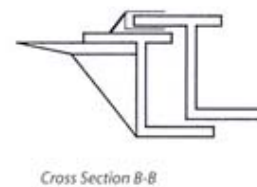


Metal

Wood

Cross Section B-B

## Metal pivot window



Cross Section B-B



Rectangular section pile seal, rigid plastic carrier with integral secondary seal.

**H612PV1604AW**

White carrier, white pile – length 2030mm

**H612PV1604AG**

White carrier, grey pile – length 2030mm

**H612PV1605AB**

Brown carrier, brown pile – length 2030mm



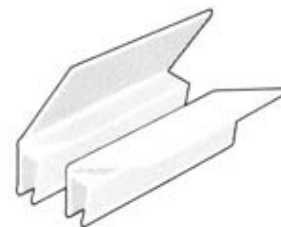
Brushstrip seal, profiled rigid plastic carrier.

**H612PV6132**

White carrier, white brush – length 2030mm

**H612PV6226**

Brown carrier, black brush – length 3000mm



Clip on seal co-extruded rigid PVC section with high performance thermoplastic elastomer joint for sealing the perimeter of metal casement windows.

**H612PV5065**

White 65° flange – length 2030mm

**H612PV5030**

White 30° flange – length 2030mm

## Seals for External Doors

Gaps around external doors are the major cause of heat loss. The Superseal™ range for domestic doors includes seals for edges, thresholds and also a letterbox cover. The brush seals are ideal for a door in regular use, the strong nylon filaments stop draughts and reduce noise without restricting the movement of the door.

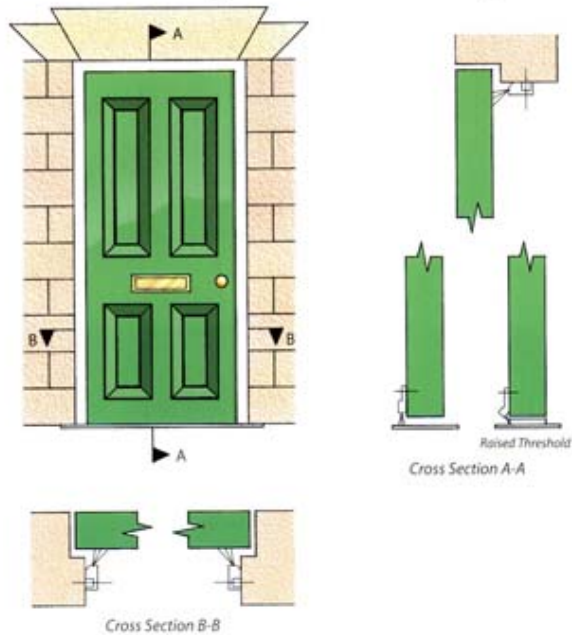
Fitting Superseal™ products not only makes the home a warmer place, it is environmentally friendly by helping to reduce green-house gases.

### Features

- Uneven surfaces are sealed by the independent movement of brush filaments.
- Simple retrofit.
- Conforms to draughtstrip performance standards BS7376 (where applicable).

**All seals are complete with fixings**

### External single timber door – side hinged



Black brushstrip seal, upright aluminium carrier, mill finish.

**H612AL1388**  
Brush height 26mm – length 914mm



Black brushstrip seal, upright rigid plastic carrier.

**H612PV0101**  
White PVC carrier, brush height 26mm – length 914mm

**H612PV0111**  
Brown PVC carrier, brush height 26mm – length 914mm



Black brushstrip seal, angled PVC or aluminium carrier.

**H612AL1310**  
Mill finished aluminium carrier, brush height 26mm – length 914mm

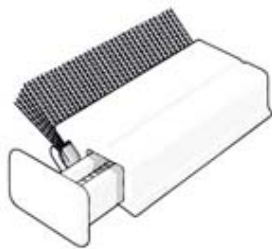
**H612PV0201**  
White PVC carrier, brush height 26mm – length 914mm

**H612PV0211**  
Brown PVC carrier, brush height 26mm – length 914mm

## External double timber door – side hinged



Cross Section B-B



Brushstrip seal, rigid plastic carrier with integral secondary seal. Complete with end cap.

**H612PV1462**

White carrier, white brush – length 2030mm

**H612PV4637**

White carrier, black brush – length 2030mm

**H612PV1464**

Brown carrier, black brush – length 2030mm



Foam edge seal, flexible plastic covered foam with rigid PVC carrier.

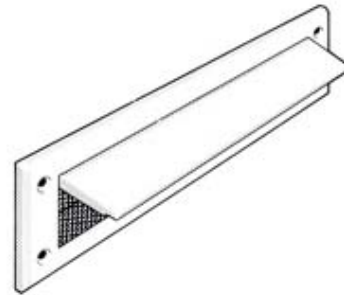
**H612PV4652**

White carrier, white covered foam – length 2030mm

**H612PV4654**

Brown carrier, brown covered foam – length 2030mm

## Letterbox seals



### Description

Letterbox seals are manufactured from hardwearing Nylon 6 filaments, located in a high impact polystyrene moulded frame.

The moulded frame has four countersunk holes, avoiding the central fixings of the exterior letter plate. Suitable for letterbox openings up to 275mm x 50mm. Fixing screws supplied.

### Applications

**H612LB0040**

White Letterbox double brush without flap

**H612LB0041**

Brown letterbox double brush without flap

**H612LB0050**

White letterbox double brush with flap

**H612LB0051**

Brown letterbox double brush with flap

**H612LB0043**

White letterbox single brush without flap

**H612LB0044**

Brown letterbox single brush without flap

## Seals for Internal doors

Although it is accepted that external doors need to be sealed against cold air from outside, it is not so widely appreciated that there are considerable benefits to be gained from reducing air flow from room to room within a building. Sealing internal doors will increase comfort levels by reducing draughts and can help prevent condensation from spreading to another room.

### Features

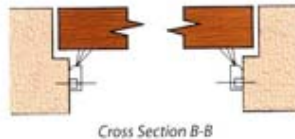
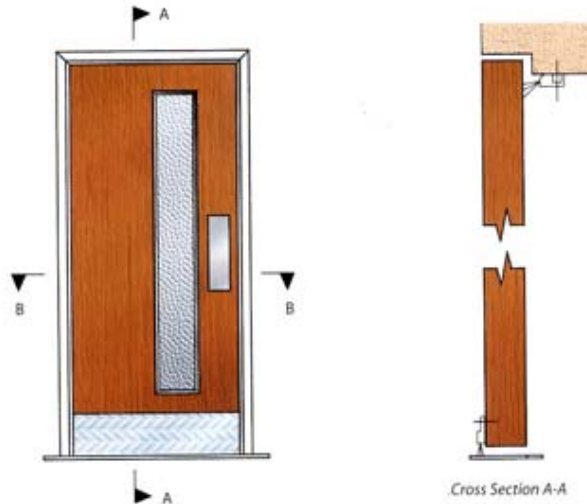
- Conforms to draughtstrip performance standard BS7386 (where applicable).
- Long life filaments resist permanent deformation.
- Uneven surfaces are sealed by the independent movement of brush filaments.
- Simple retrofit.
- Effective cold smoke seal.

62

Prestige bottom door seals with concealed fixing.

**All seals are complete with fixings**

### Internal single timber door – side hinged



Black brushstrip seal, upright aluminium carrier, mill finish.

**H612AL1388**  
Brush height 26mm – length 914mm



Black brushstrip seal, upright rigid plastic carrier.

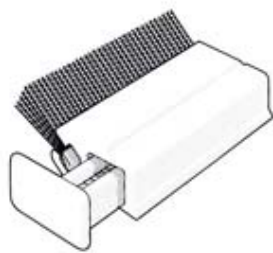
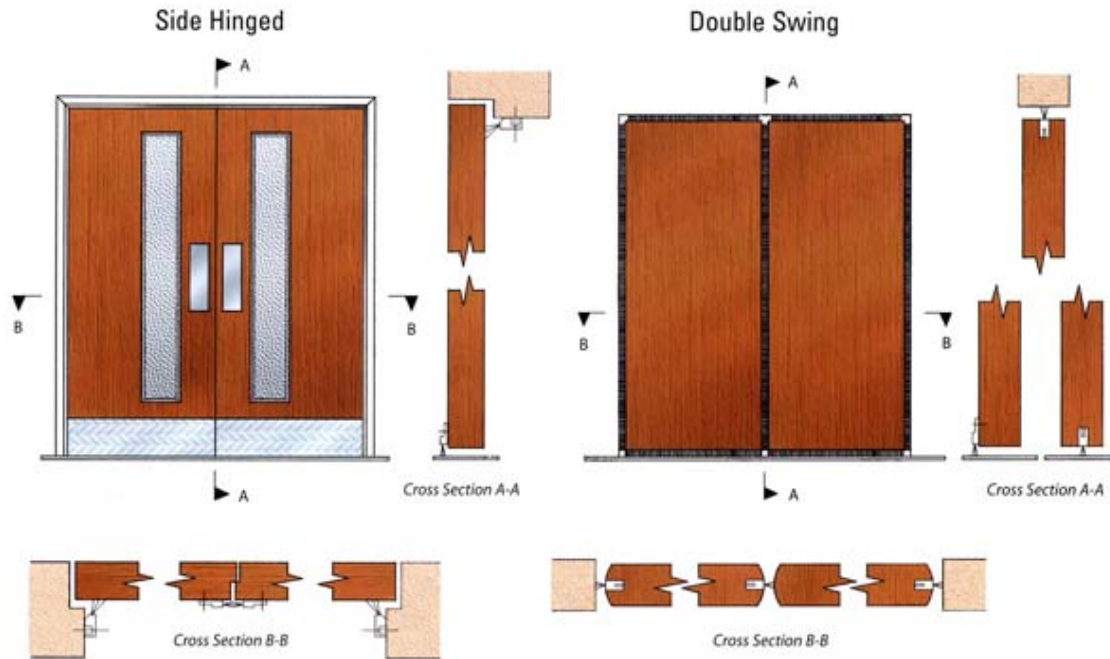
**H612PV0101**  
White PVC carrier, brush height 26mm – length 914mm  
**H612PV0111**  
Brown PVC carrier, brush height 26mm – length 914mm



Rectangular section pile seal, rigid plastic carrier with integral secondary seal.

**H612PV1604AW**  
White carrier, white pile – length 2030mm  
**H612PV1604AG**  
White carrier, grey pile – length 2030mm  
**H612PV1605AB**  
Brown carrier, brown pile – length 2030mm

## Internal double timber doors



Brushstrip seal, rigid plastic carrier with integral secondary seal. Complete with end cap.

**H612PV1462**

White carrier, white brush – length 2030mm

**H612PV4637**

White carrier, black brush – length 2030mm

**H612PV1464**

Brown carrier, black brush – length 2030mm



Long flange pile seal, rigid plastic carrier with integral secondary seal.

**H612PV8602AW**

White carrier, white pile – length 2030mm

**H612PV8602AG**

White carrier, grey pile – length 2030mm

**H612PV1603AB**

Brown carrier, brown pile – length 2030mm



**H612AL1571**

Centre Door Seal

Black brushstrip in an mill finished aluminium carrier. length 2100mm

### Double Swing

The product we recommend for sealing double swing doors is fitted into a 5mm groove routed in the door or door frame and is adjustable according to the gap to be sealed. This product provides an unobtrusive seal for a door which is normally very difficult to seal due to the swing action.

## Seals for Glass Doors

*Kleeneze Sealtech provides a range of seals for revolving, sliding and hinged doors for banks, hotels, offices, retail and other buildings with prestige entrances. Brushstrip seals are effective in reducing draughts, helping to maintain air conditioned areas, repel rodents and keep out dust from buildings.*

*All prestige entrance seals can be provided as self adhesive, punched for screw fixing and either anodised or painted to co-ordinate with on site architecture.*

### Hinged Glass Doors

As the trend to construct glass entrances with less and less framing continues, the gaps around them can still cause problems. Our seals are supplied in kit form and there is no need for any drilling as it is applied to the doors using self adhesive tape.

By fitting brushstrip all around the door as shown in the illustration, it will not only eliminate draughts immediately, but is also an effective form of pest control. This can be particularly important in large retail stores, hotels and restaurants where glass doors are used extensively.



Top



Middle & Sides



Bottom



## Sliding Glass Doors

Large glass sliding doors invariably have wide gaps on each side. Brushstrip is effective in sealing these gaps and the filaments deflect easily over frames, without marking or dragging the door hardware as the doors open.

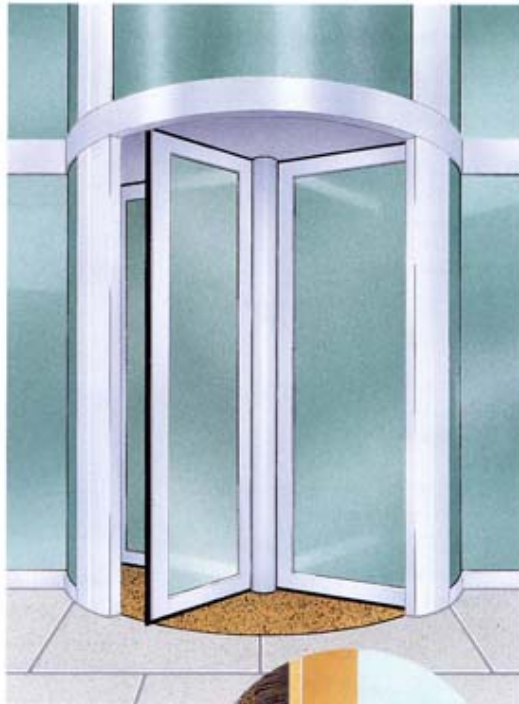


**No matter how unusual or straight forward your company's brush requirements may be, our specialists will be delighted to advise you on your optimum solution.**

We can help you find the solution.  
For free advice call us now on:  
**0117 947 5149**

## Revolving Doors

A tailor made brushstrip seal has many advantages – it not only stops cold draughts blowing into a busy reception, but also assists in maintaining a climate controlled environment. An open entrance door often attracts dust and dirt. Our brushstrip solution helps prevent debris entering the building and littering the foyer.



Sealing kits are manufactured to customer specification to suit all types of revolving door, with wooden, metal or aluminium frames.



*Brushstrip filaments are hardwearing and provide an effective seal across the large gaps which are required around such doors. The flexibility of the brush filaments allows unimpeded movement of the door panels as they only lightly skim the surrounding fascia ensuring the surface is not scratched. Special formed corner sections can be used to provide a complete all round seal.*



## Prestige Seals for Windows and Doors

### Excel Seals

The Excel range of architectural seals has been developed and manufactured to a high level of aesthetic and technical specification. Design concepts from concealed fixings and colour co-ordination to rebated and adjustable seals ensure usability in a wide variety of environments.

### Rebated Threshold Seals

The seal is designed to fit within a premachined groove in the bottom of the door leaf, finished and secured with retaining brackets.

Black Nylon 6 brushstrip located in a dual extruded aluminium carrier, mill finish with plated steel retaining brackets.



#### Features

- Concealed carrier with no visible fixings on door faces
- Minute integral vertical adjustment ensures a perfect fit
- Extremely durable and hardwearing brush filaments ensure an effective seal on un-even surfaces.
- Effective cold-smoke seal



### Bottom Door Seal

Upright and angled brushstrip suitable for doors with a level or raised threshold.

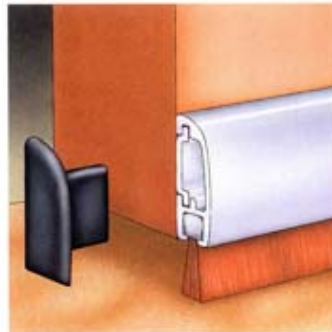
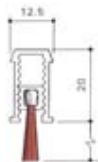
Concealed by a slide-on fascia, mill finished and secured with black plastic end-caps, the back strip is pre-slotted for vertical adjustment to accept fixing screws supplied. Length 914mm.

Black Nylon 6 filament.

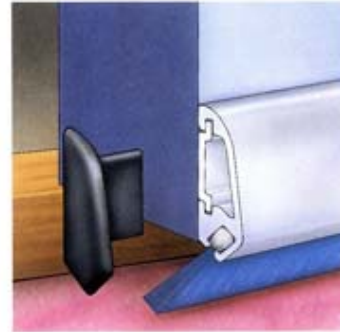
Anodised or powder coated to order.



H671AC1103  
19mm trim to seal gaps from 2mm to 12mm  
H671AD1103  
32mm trim to seal gaps from 15mm to 25mm.



Upright carrier 914mm  
H671TA1103  
13.5 mm brush trim  
H671TB1103  
26mm brush trim



Angled carrier 914mm  
H671TC1103  
13.5mm brush trim  
H671TD1103  
26mm trim length





**Features**

- No visible fixings
- Range of size and colour to suit any application
- Excellent weather resistance and compression recovery
- Effective cold-smoke seal

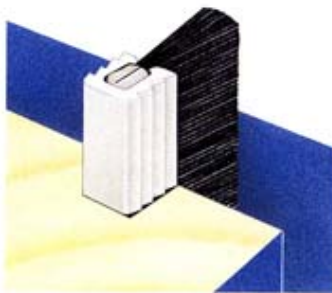
*No matter how unusual or straight forward your company's brush requirements may be, our specialists will be delighted to advise you on your optimum solution.*

We can help you find the solution.  
For free advice call us now on:  
**0117 947 5149**

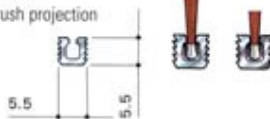


**Rebated Edge Seals**

Flush fitting with frame or leaf, designed to be press fit or fixed with adhesive.  
Standard length 2100mm.  
Black nylon 6 filament.

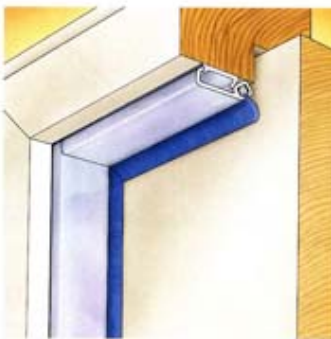


H671RD1101  
10mm brush projection  
H671RE1101  
4mm brush projection

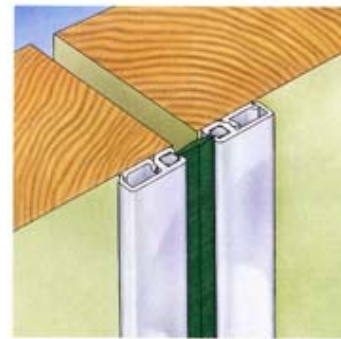
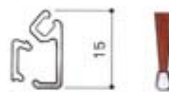


**Edge Seal**

A versatile system for sealing the perimeter and meeting edges of doors and windows.  
The back strip is pre-punched to accept the fixing pins provided and is concealed by a snap-on fascia.  
Mill finished, other colours available to special order. Standard length 2100mm



Angled edge seal with 10mm brush projection.  
H671CA1101  
Black filament  
H671CA1201  
White filament



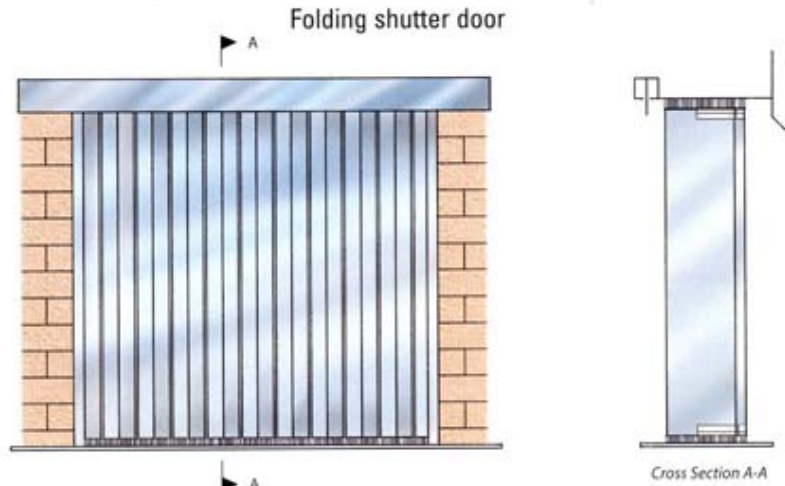
Straight edge seal with 10 mm brush projection  
H671CG1101  
Black filament  
H671CG1201  
White filament



## Seals for Folding Shutter Doors

Specially prepared kits comprising pre-cut lengths of brushstrip and shaped nosing pieces are available to seal the top and bottom of most makes of folding shutter doors.

Available with either 13mm or 26mm brush length, all components are pre-drilled for fitting with 3mm rivets. Panel rib cavities can be filled using a suitable mastic sealant.



### Application Guide

MAKE OF DOOR	KIT TYPE
ACME	B
BOLTON	A
BOND	B
BOSTWICK	B
BRODY	B
BROOKS	B
DENISON KETT	B
DIXON POWNER	B
HASKINS	B
HENDERSON	C
HOLTS	A
KENSON	A
MARTIN ROBERTS	A
MERCIAN	B
POLLARD	B
POTTER RAX	B
PRIORY	A
STANLEY	A
SYSTON PICKETT	B
WESTLAND	D



*Type A*

Kit comprising half-width panel sections with a rounded nosing piece.



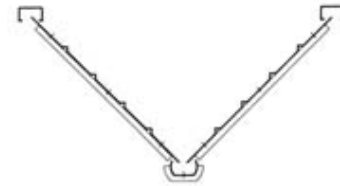
*Type B*

Kit comprising half-width panel sections with a pointed nosing piece.



*Type C*

Kit comprising alternate fitting long and short panel sections with a rounded nosing piece.



*Type D*

Kit comprising full-width panel sections with a flattened nosing piece.



#### How to specify

Make of door:  
Width of individual door panels:  
Number of pairs of door panels:  
Largest gap size to be sealed:

## Seals for Steel Doors

The Superseal range of brushstrip is ideal for all types of steel doors. The Type 25 range can be easily fitted all around the door for total noise and draught proofing. This also helps deter rodents leading on to complete Pest Control.

### Roller Shutter Doors

The gaps around roller shutter doors have always been difficult to seal. They allow cold draughts and vermin into the building. The wide guide channels also allow the door to rattle, creating noise and sometimes triggering security alarms.

Rollaseal™ is a clip-on brushstrip seal that slides onto the side guide channels. The strong PVC carrier and hardwearing nylon filaments ensure long life and full door contact without binding.

To complete the all round seal, use Type 25 45° angled carrier for the top and along the bottom T bar.



**Rollaseal™**  
H610RD3035  
Black PVC carrier  
Black nylon filaments – Trim 35mm  
Overall length 3000mm  
2 retaining end clips

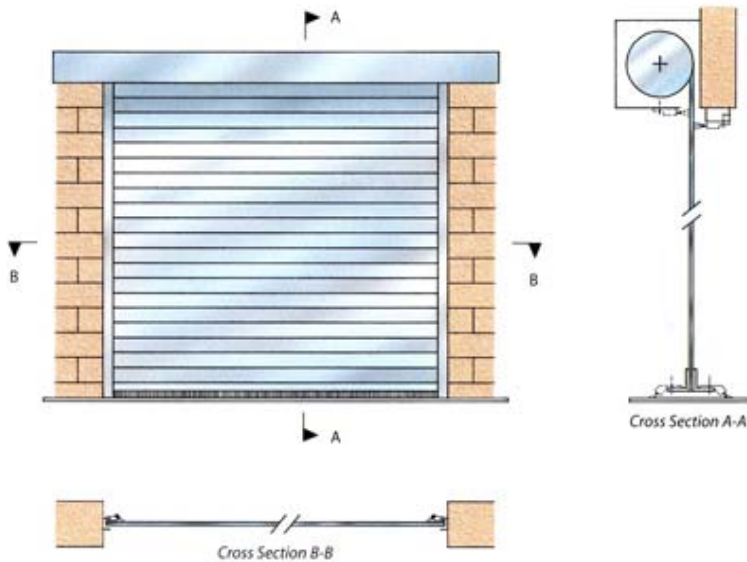
### Up and over steel door

These doors are often found in garages and workshops.

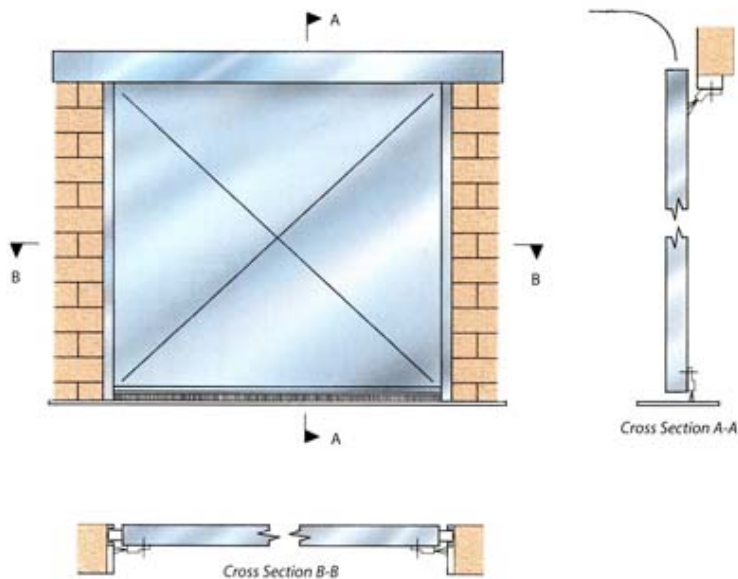
The gaps around these doors create the same problems of cold draughts and vermin as roller shutter doors.

The bottom and sides can be sealed with Type 25/180° carrier brushstrip, and the tops can be finished off with a Type 25/45° carrier brushstrip which will meet the door to create a snug fit when closed.

### Roller shutter door



### Up and over steel door



### Application Guide

DOOR TYPE	BOTTOM	TOP	SIDES
Roller Shutter	Type 25 45° carrier	Type 25 45° carrier	Rollaseal™
Up & Over Doors	Type 25 180° carrier	Type 25 45° carrier	Type 25 180° carrier

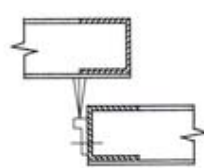
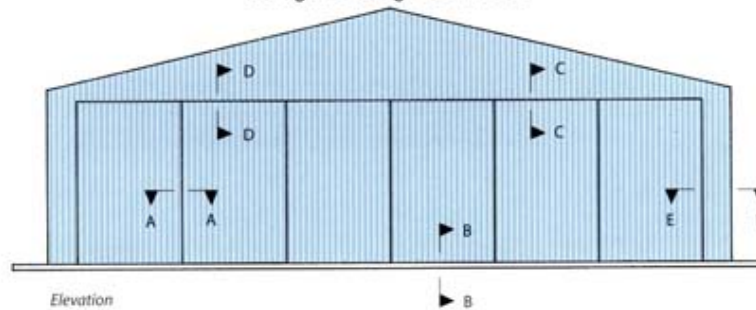
8

Refer to page 8 for more styles and sizes to suit your application.

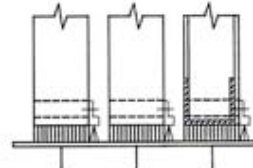
## Seals for Industrial Sliding Doors

Standard brushstrip seals provide the only effective solution for the demands and rigours of industrial sliding doors. From corrugated and fabricated surfaces through to stone and brickwork walls and uneven ground surfaces, brushstrip gives a durable, flexible and long life seal. In a range of trim sizes from 10mm to 215mm, no other sealing medium can offer the versatility of Superseal brushstrip seals.

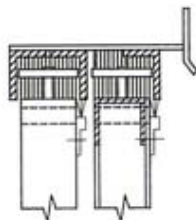
### Hangar sliding steel doors



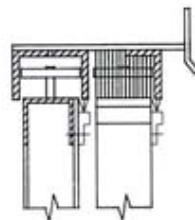
Cross Section A-A



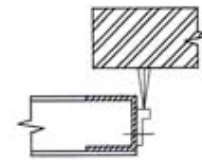
Cross Section B-B



Cross Section C-C



Cross Section D-D



Cross Section E-E



#### How to specify:

Refer to the illustration and application guide to select the type of seal required according to the width of the gap to be sealed.



Refer to page 8 for more styles and sizes to suit your application.

### Application Guide

Door Type	Bottom	Top	Sides	Centre
Hangar Sliding	Type 25	Type 25		
Radius Tracked	Type 25	Type 25	Type 25	Type 25
Double Steel	Type 25	Type 25	Type 25	Type 25 / 45°
Timber Sliding	Type 25	Type 25		
Hinged Doors	Type 25	Type 25	Type 25	Type 25
	180° carrier	45° carrier	45° carrier	180° carrier

see pages 8 - 13 for standard products and special manufacture



Type 25  
180° carrier

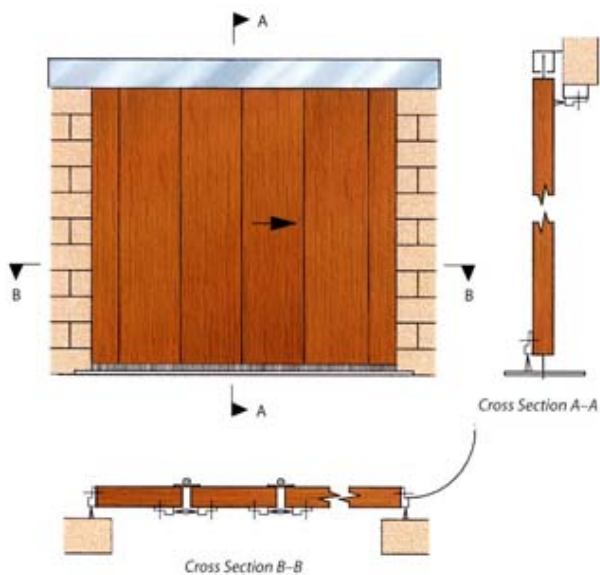


Type 25  
45° carrier

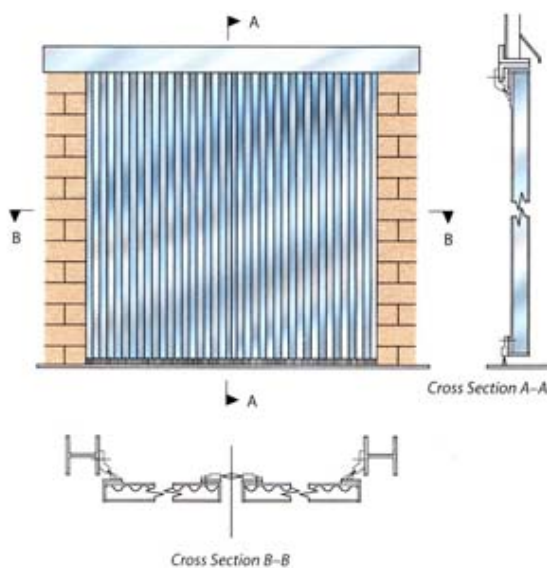


Type 25  
90° carrier

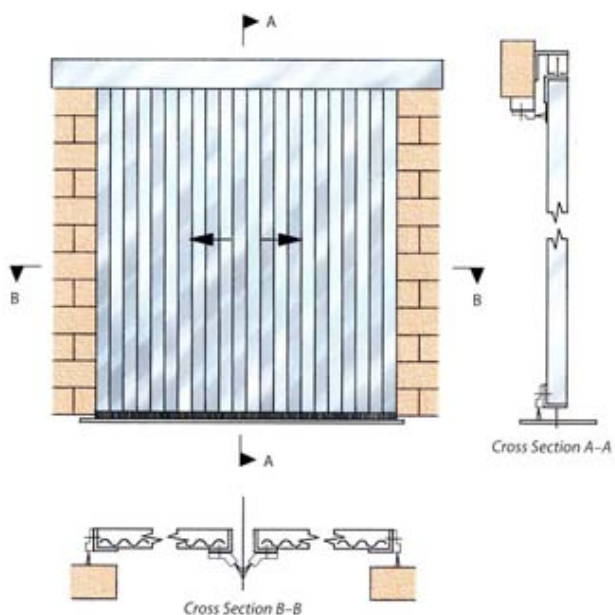
### Radius tracked timber sliding door



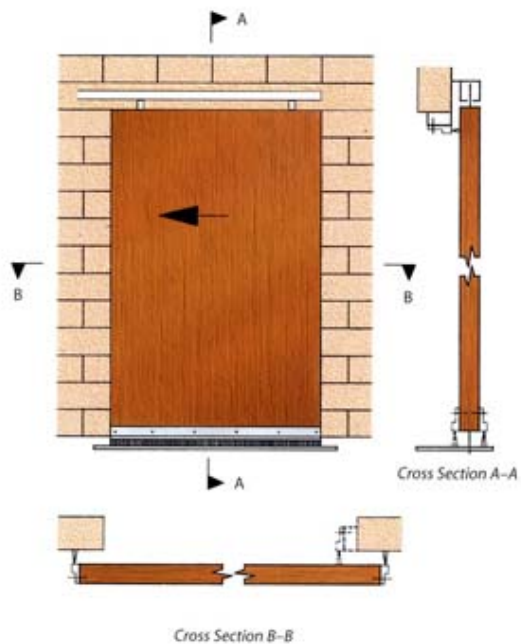
### Steel Hinged



### Double steel sliding door



### Timber sliding door



**8** Refer to page 8 for more styles and sizes to suit your application.

## Compression Seals for Windows and Doors

### Compression Seals

A range of performance compression strips for efficient and cost effective perimeter sealing of timber and metal frame windows and doors.

#### Features

- 10 year life
- Will not harden or crack with age or cold, unlike plastic and vinyl strips.
- Excellent resistance to weather, ozone and UV light.
- Simple retrofit

#### Fitting

Effective gap seal sizes are shown for each product. The recommended compression for timber components is 1.5mm to allow for seasonal movement. Self adhesive seals may be stapled for additional security. Silicone seals should be bonded with silicone HM.



EPDM Cellular profile with a self-adhesive backing. 9.5mm x 5mm to seal gap 3mm – 5mm.

H640CS00P1  
White 100m roll  
H640CS00P3  
Brown 100m roll



EPDM cellular profile with a self adhesive backing. 9mm x 3mm to seal gap 2mm – 2.5mm

H640CS00E1  
White – 100m roll  
H640CS00E3  
Brown – 100m roll  
H640CS00K4  
Grey – 100m roll



Extruded silicone tube with arrowhead tongue for groove fixing to seal gap 3mm – 6.5mm

Groove Dimensions 2.5mm x 4mm deep  
H640CS00S1  
White 100m roll  
H640CS00S2  
Black 100m roll  
H640CS00S3  
Brown 100m roll

Groove Dimensions 3.5mm x 5.5mm deep  
H640CS00T2  
Black 100m roll



Extruded silicone "O" tube to seal gap 4mm – 10mm

H640CS00N4  
White 4.5mm dia, 100m roll  
H640CS00N5  
White 5.5mm dia, 100m roll  
H640CS00N1  
White 7.5mm dia, 100m roll  
H640CS00N3  
Brown 7.5mm dia, 100m roll  
H640CS00N6  
White 10.5mm dia, 25m roll



Self adhesive vinyl strip to seal gap 2mm – 6mm

H640CS00V1  
White 22mm unfolded 10m roll  
H640CS00V2  
Black 100m roll



Silicone rubber profile for sealing gaps between louvre window slats.

H640LV0000  
Clear 20m roll



Woven polypropylene pile with a self-adhesive backing, to seal gap 3mm – 5mm.

H640CS00B4  
Grey 7mm x 6mm 325m roll

## Sealants

A range of sealants developed for a wide range of applications from construction and draughtproofing to the automotive industry. Each product has its own features and benefits ensuring suitability, longevity and performance.

	Polyurethane GPS92	Silicone HM
Applications	Metal casement doors and windows. Light building components, e.g. plastics, tiles, window frames, ducts, flooring, electrical fittings, cars and commercial vehicles.	General non-porous surfaces, e.g. glass, ceramics, aluminium, laminates and enamel.
Colours	White.	White, clear.
Size	310 ml cartridge.	310 ml cartridge.