

ENDERS

COMMERCIAL AND INDUSTRIAL SLIDING AND FOLDING DOOR HARDWARE



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HENDERSON

P C Henderson has long been acknowledged as the world leader in the design and manufacture of Sliding Gear Systems for residential, commercial and industrial applications.

Established in 1921, the company is a member of Cardo Door, the largest Business Area within Cardo AB, a major European engineering products group with an annual turnover in excess of £700 million.

P C Henderson is based in Bowburn in North East England and has subsidiaries in Holland and Ireland. The company has a long established sales and distribution network in over 70 countries, with head office support from Henderson's fully trained technical sales team.

The company is committed to quality and is registered to BS EN ISO 9002: 1994 Quality Systems.

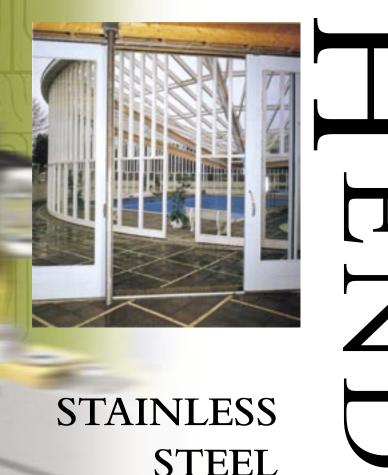
HENDERSON COMMERCIAL RANGE

The three models in the Henderson commercial range - Husky Glass, Pacer and Flexirol - are suitable for doors weighing up to 1100 lbs. (500kg). They are ideal for applications such as shop-fronts, hotels, conference centers and offices, where smooth action, high performance and aesthetics are important.

You can choose from wood, aluminum and glass door options, with straight sliding, folding and multidirectional stacking systems. Flexirol multidirectional systems can accommodate 90° and 135° movement. Pacer systems allow 135° movement.

Aluminum track can be painted on site to match interior colors and ceilings. Pacer track has the option of clip-on aluminum fascia.





STEEL

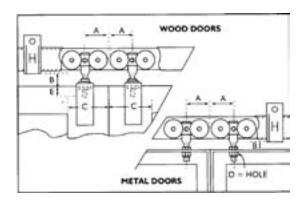
SLIDING DOOR HARDWARE

STAINLESS STEEL FOLDING HARDWARE ALSO AVAILABLE. SEE PAGE 82.

Since 1921 Henderson has been developing Sliding Gear Systems to enable almost any object to slide. Throughout the world, Henderson gear is used for a wide variety of applications.

For areas exposed to extreme levels of corrosive elements or where a high level of hygiene is essential, Henderson has developed a stainless steel range. Manufactured from high quality stainless steel and incorporating the latest polymers, this gear offers a high level of performance and corrosion resistance.

The Henderson Stainless Steel range can be used for an array of applications including chemical factories, oil rigs, abattoirs, cold storage, food processing plants and areas exposed to salt water. Whatever the conditions, Henderson Stainless Steel Gear will perform.



A = Distance from the center of the hanger to wheel

B = Vertical adjustment distance

C = Minimum door stile width

D = Diameter of holes (Steel doors)

E = Hole depth for pendant bolt

Wood Doors	Stainless Track Hangers	280 284N	290 53	301 53
Α		1-3/16"	1-11/16"	2-11/16"
В	Min.	9/16"	7/8"	1-1/4"
	Max.	15/16"	1-1/8"	2-3/4"
С		-	4-1/2"	4-1/2"
E		13/16"	7/8"	2-3/8"

Metal	Stainless Track	280	290	301
Doors	Hangers	285N	56	56
Α		1-3/16"	1-11/16"	2-11/16"
В	Min.	1/4"	3/8"	13/16"
	Max.	15/16"	Ι"	2-1/2"
D		5/16"	7/16"	11/16"

280/SS, 290/SS, 301/SS

TRACK, GUIDE, CHANNEL, GUIDES

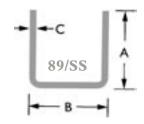
Track	Dimensions			ack Dimensions Capacities for straight sliding doors			U
	C	Α	В	Max. Door weight	Max. Door height	Door thickness	
280/SS	1/16	1-1/8	1-1/4	200lbs.	96	3/4 to 2"	
290/SS	1/8	1-3/4	1-1/2	300lbs.	120	I-3/8 to 2"	
301/SS	3/16	2-5/8	2-1/4	600lbs.	144	I-3/4 to 2-1/4"	

Material: All track and channel in grade 316L

(A4) stainless steel

Supply lengths: 2000mm (6'6") and 3000mm (9'10")

Channel	Dimensions			
	С	Α	В	
89/SS	1/8"	3/4"	3/4"	

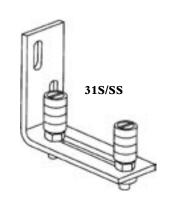


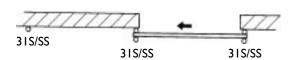
Guides and channels are essential for stability, safety and functioning of the system.

Guide 31S/SS

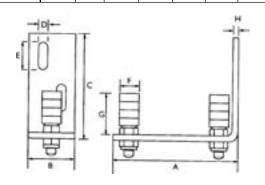
Grade 316(A4) stainless steel angle with horizontal adjustable nylon guiding wheels on grade 304(A2) stainless steel bolts.

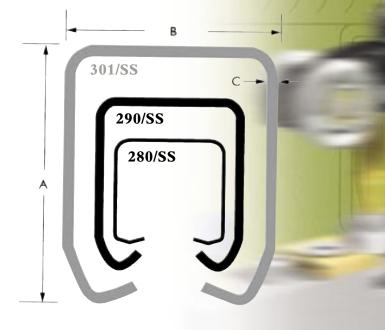
Guide 31S/SS gives unhindered access and is suitable for applications where dirt might enter the guide channel and hinder sliding.

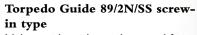




Guide	Dimensions							
	Α	В	С	D	Е	F	G	Н
31S/SS	5-3/8"	2"	4-1/2"	3/8"	1"	7/8"	2-3/8"	1/8"
22/IAC/88	3/8"	5/8"	5-7/8"	3-1/8"	1-3/8"	1-7/8"	2-1/8"	- 1"





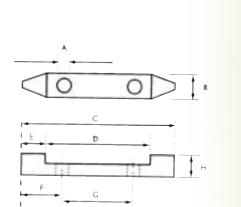


Nylon guide with stainless steel fixings.

Torpedo guide in combination with 89/SS guide channel rebated in door or fixed to underside of door.



SCREW



STAINLESS STEEL BRACKETS

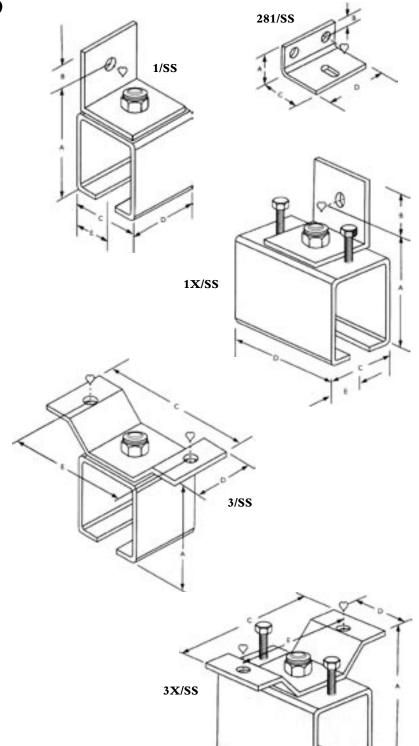
SOFFIT/FACE FIXED

	I/SS			1	Dimen	sions	
		Α	В	С	D	Е	Bolt
ı	281/SS	3/4"	1/4"	1-1/8"	1-5/8"	-	M5
	1/290/SS	3-3/8"	3/4"	2"	1-5/8"	1"	M8
	1/301/SS	4-3/8"	1-1/8"	2-5/8"	2-5/8"	1-1/4"	MI0

IX/SS			1	Dimen	sions	
	Α	В	С	D	Е	Bolt
1X/290/SS	3-3/8"	3/4"	2"	3-7/8"	- 1"	M8
1X/301/SS	4-3/8"	1-1/8"	2-5/8"	4-1/2"	1-1/4"	MI0

3/SS		1	Dimen	sions		
	Α	В	С	D	Е	Bolt
3/290/SS	2-7/8"	-	3-1/2"	1-5/8"	2-1/2"	M8
3/301/SS	3-7/8"	-	5-3/8"	2-3/8"	4-1/8"	MI0

3X/SS			1	Dimen	sions	
	Α	В	С	D	Е	Bolt
3X/290/SS	2-7/8"	-	3-1/2"	1-5/8"	2-1/2"	M8
3X/301/SS	3-7/8"	-	5-3/8"	2-3/8"	4-1/8"	MI0



Brackets and center-to-center distance

The center-to-center distance of the brackets can vary depending on track length. Recommended spacing is 24" and in case of maximum load 20".

Jointing brackets are required at each track joint; the letter "X" denotes the jointing bracket. It is recommended, should stainless steel brackets or track be fitted directly to a material which is not of stainless steel, that a packing be placed between the two surfaces to avoid possible contact corrosion. All brackets are made in grade 316(A4) stainless steel, all nuts and bolts in grade 304(A2) stainless steel. For fixing of all stainless steel sliding door hardware stainless steel fixings must be used!

STAINLESS STEEL BRACKETS

4/SS

4R/SS

SOFFIT FIXED

4/SS	Dimensions						
	Α	В	С	D	Е	Bolt	
4/290/SS	2-7/8"	-	1-5/8"	3-1/2"	2-1/2"	M8	
4/301/SS	3-7/8"	-	2-3/8"	5-3/8"	4-1/8"	MI0	

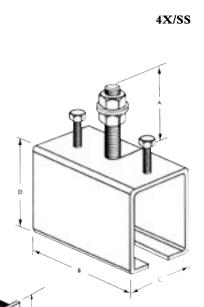
4R/SS		D			
	Α	В	С	D	Bolt
4R/280/SS	2"	2"	1-1/2"	1-1/2"	M8
4R/290/SS 2"		1-5/8"	2"	2-1/4"	MI0
4R/301/SS	2-1/2"	2-5/8"	2-5/8"	3-1/8"	MI2

4X/SS		D	imensio	ns	
	Α	В	С	D	Bolt
4X/290/SS	-	3-7/8"	2"	2-1/4"	MI0
4X/301/SS	-	4-1/2"	2-5/8"	3-1/8"	MI2

4RX/SS		Dimensions					
	Α	В	С	D	Bolt		
4RX/280/SS	2"	2"	1-1/2"	1-1/2"	M8		
4RX/290/SS 2"		3-7/8"	2"	2-1/4"	MI0		
4RX/301/SS 2-1/2		4-1/2"	2-5/8"	3-1/8"	MI2		

HH3/SS	Di	ons	
	Α	В	С
HH3/290/SS	1-1/4"	1-1/4"	4"
HH3/301/SS	1-5/8"	1-5/8"	5"

109/SS	Di	mensio	ns
	Α	В	С
109/SS	2-1/2"	2"	1/2"

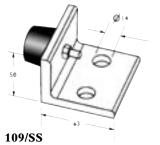




109/SS Doorstop

Doorstops can be fitted at ground height or on the wall of an opening. (2/3 of the door height from the ground).

grade 304(A2) stainless steel hexagonal screws.



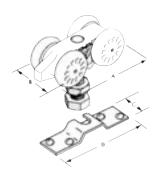
HH3/SS

STAINLESS STEEL HANGERS

Track	Hanger	D	imensio		Max. Door		
Type		A	В	С	D	.0′	Capacity
280	284N/SS	2"	1-1/8"	7/8"	3-1/8"	8	100 lbs.
280	285N/SS	2"	1-1/8"	-	-	8	100 lbs.
280	284/SS	2-1/2"	-	7/8"	3-1/8"	8	200 lbs.
280	285/SS	2-1/2"	1-1/8"	-	-	8	200 lbs.

Hanger body and wheels of high-performance nylon. All metal components in grade 304(A2) stainless steel.

N.B. Maximum door capacity means the maximum weight of each door carried by two hangers.



284N/SS for wood doors - 100 lbs. 284/SS for wood doors - 200 lbs. 285N/SS for metal doors - 100 lbs. 285/SS for metal doors - 200 lbs.

Track	Hanger		Dimensions						
Type		A	В	C	D	E	F	Capacity	
290	53/290/SS	3-3/8"	7-1/8"	3"	1-1/2"	1-3/4"-2-1/4"	1/8"	300 lbs.	
301	53/301/SS	5-3/8"	7-1/8"	3"	1-7/8"	1-3/4"-2-1/4"	1/8"	600 lbs.	

53/290/SS Hanger body of high-performance nylon. All other components in grade 304(A2) stainless steel.

53/301/SS Complete in grade 304(A2) stainless steel.

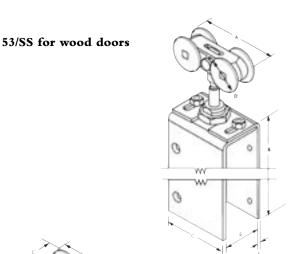
N.B. Maximum door capacity means the maximum weight of each door carried by two hangers.

Track	Hanger	Dimensions					Max. Door
Type		A	В	С	D	.Ø	Capacity
290	56/290/SS	3-3/8"	1-5/8"	1-1/8"	1-1/2"	MI0	300 lbs.
301	56/301/SS	5-3/8"	3-1/8"	1-3/4"	2"	MI6	600 lbs.

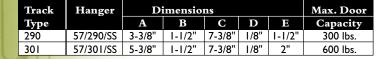
56/290/SS Hanger body of high-performance nylon. All other components in grade 304(A2) stainless steel.

56/301/SS Complete in grade 304(A2) stainless steel.

N.B. Maximum door capacity means the maximum weight of each door carried by two hangers.





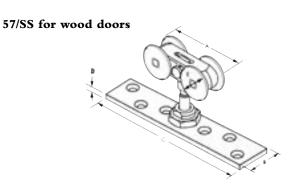


57/290/SS Hanger body of high-performance nylon. All other

components in grade 304(A2) stainless steel.

57/301/SS Complete in grade 304(A2) stainless steel.

N.B. Maximum door capacity means the maximum weight of each door carried by two hangers.



STAINLESS STEEL HARDWARE FOR TOP-HUNG WOOD OR METAL STRAIGHT SLIDING DOORS

281/SS

CAPACITY

Max. door weight: 100 LBS. OR 200 LBS.

Max. door height: 96"

Door thickness: 3/4" to 2"

APPLICATIONS

For sliding doors or gates in abattoirs, oil rigs, boats, chemical plants.

TECHNICAL INFORMATION

280/SS Track: Grade 316L(A4) stainless steel

provided with 1/4" punched holes

for direct soffit fixing.

Hangers: 284N/SS and 285N/SS nylon body,

nylon wheels, axles, fixing plate, bolt and nuts in grade 304(A2) stainless steel. Max. 100 lbs. per two hangers.

Hangers: 284N/SS and 285N/SS nylon body,

nylon wheels, axles, fixing plate, bolt and nuts in grade 304(A2) stainless steel. Max. 200 lbs. per two hangers.

Guide: 102N nylon guide

Guide: 89/2N/SS nylon guide used in

conjunction with stainless steel

channel 89/SS.

Guide Channel: 89/SS Grade 316L(A4) stainless steel.

Face bracket: 281/SS face fixed in grade 316L(A4)

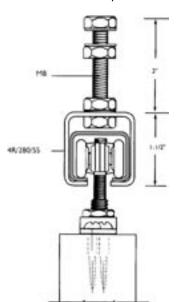
stainless steel.

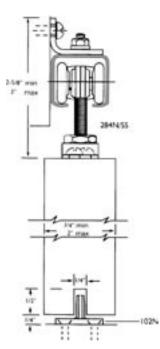
Face bracket: 4R/280/SS soffit fixed in grade 316L(A4)

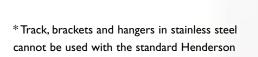
stainless steel.

Stop: 287/SS rubber stop with stainless

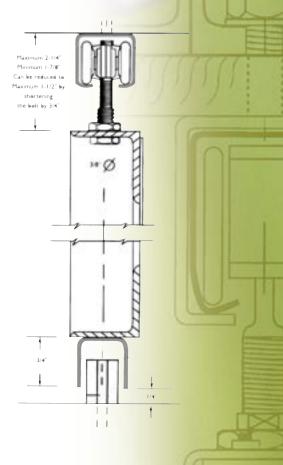
steel plate and bolt.



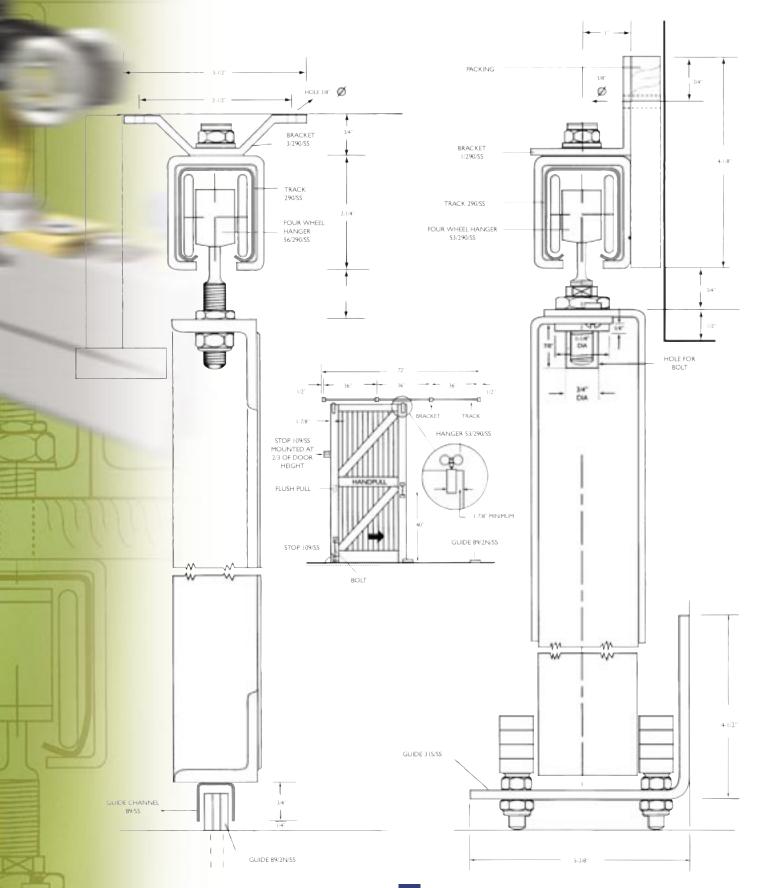




non-stainless 280 range.



STAINLESS STEEL HARDWARE FOR STRAIGHT SLIDING DOORS



STAINLESS STEEL HARDWARE FOR TOP-HUNG WOOD OR METAL STRAIGHT SLIDING DOORS

CAPACITY

Max. door weight: 300 LBS. Max. door height: 120" Door thickness: 1-3/8" to 2"

APPLICATIONS

For lightweight doors in abattoirs, boats, oil rigs, food industry, chemical plants etc.

DOOR TYPES

Wood doors, either solid or glazed, for industrial use require a strong, solid frame. Metal doors can be of angle or box section.

TECHNICAL INFORMATION

Track: 290/SS made from 1/8" thick grade

316L(A4) stainless steel, available in 72"

and 96" lengths.

Brackets: 1/290/SS in grade 316L(A4) stainless

steel for face-fixing or 3/290/SS for soffit mounting. The center-to-center distance of the brackets can vary depending on track length. Recommended spacing is 36" and in case of maximum load 24".

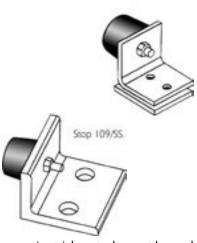
Hangers and guides: Hangers 53/290/SS, 57/290/SS and guides

89/2N/SS and 31S/SS are for wood doors. Hangers 56/290/SS with guides 89/2N/SS and 31S/SS are for metal doors. Standard hangers are supplied with a nylon body and grade 304(A2) stainless

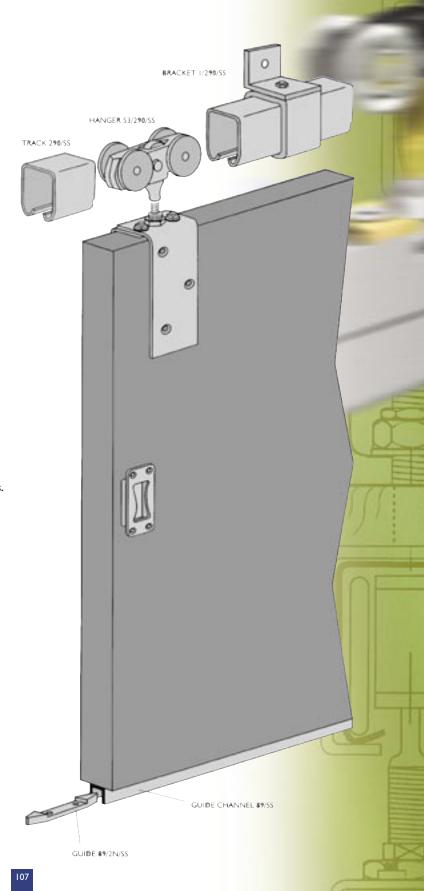
steel wheels.

Accessories: Trackstop HH3/290/SS.

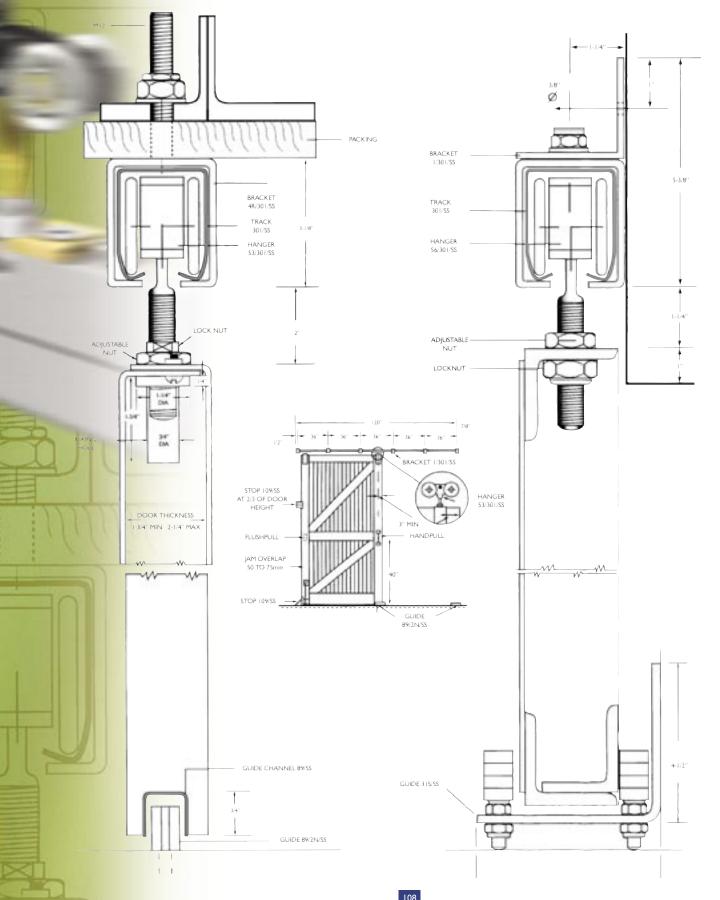
Trackstop HH3/290/SS



^{*} Track, brackets and hangers in stainless steel cannot be used with the standard Henderson non-stainless 290 range.



STAINLESS STEEL HARDWARE FOR STRAIGHT SLIDING DOORS



STAINLESS STEEL HARDWARE FOR TOP-HUNG WOOD OR METAL STRAIGHT SLIDING DOORS

CAPACITY

Max. door weight: 600 LBS. Max. door height: 144"

Door thickness: $1-\frac{11}{16}$ " to $2-\frac{1}{4}$ "

APPLICATIONS

For heavy doors or gates in abattoirs, boats, oil rigs etc. Most straight sliding doors can be accommodated.

DOOR TYPES

Wood doors, either solid or glazed, for industrial use require a strong, solid frame. Metal doors can be of angle or box section.

TECHNICAL INFORMATION

Track: 301/SS made from 3/16" thick grade

316L(A4) stainless steel, available in 72"

and 96" lengths.

Brackets: 1/301/SS in grade 316L(A4) stainless

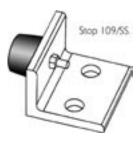
steel is the most popular for face-fixing. The center-to-center distance of the brackets can vary depending on track length. Recommended spacing is 36" and in case of maximum load 24".

Hangers and guides: Hangers 53/301/SS, 57/301/SS and guides

89/2N/SS and 31S/SS are for industrial wood doors. Hangers 56/301/SS with guides 89/2N/SS and 31S/SS are for metal doors. Hangers are supplied with a stainless steel body, wheels and bearings.

Trackstop HH3/301/SS





^{*}Track, brackets and hangers in stainless steel cannot be used with the standard Henderson non-stainless 301/301H range.







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