

## Ductwork Components

# Turning Vane System

### Product Details & Specifications



- Designed to provide economical air turns.
- Smooth external face thereby reducing friction loss and noise generation.
- Vane is roll formed from a single strip to alleviate problems of splitting.
- Continuous seam joint forms a rigid section, adding strength to the associated bend.
- 'Fastrac' fixing track is prepunched at 60mm centres to ensure constant spacing of vane.
- Unique 'Fastrac' fixing tool allows rapid assembly without the need for riveting or spot welding.

### Design Specification

Square bends shall be fitted with turning vanes, with a maximum spacing between the vanes of 60mm. They shall have an inner radius of 50mm and the maximum length of unsupported vane shall be 1250mm. The completed turning vane assembly shall be fitted into the duct by mechanically closed rivets or bolts.

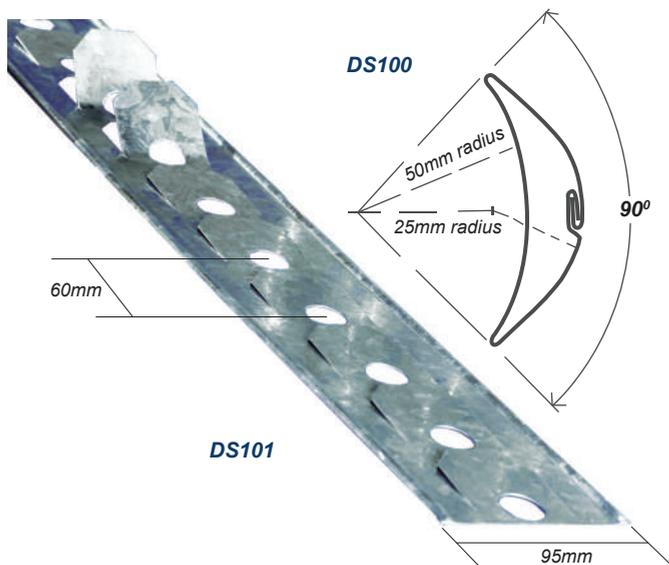
### Material Specification

	gauge	weight
DS100	0.5mm	0.587/m
DS101	0.7mm	0.533/m

British Standard BS EN 10142:2000 Steel grade and coating specification BS EN 10346:2015 DX51D +Z275 MAC.

Aerofoil turning vane and fixing track can also be supplied, manufactured from type grade 316 stainless steel.

### Dimensions



### Fixing Tool

DS104 fixing tool supplied individually, replacement tips (DS105) are available.

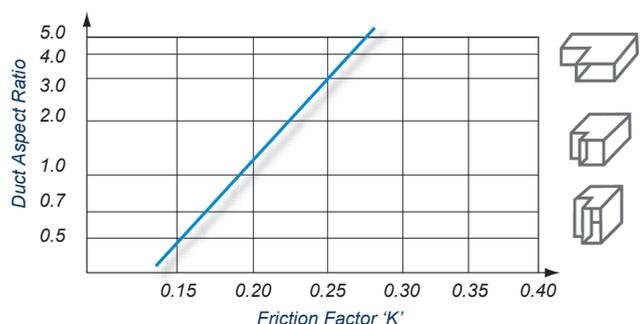


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### Packing Details

Bundles of 30m or 300m, 3m standard length.

### Duct Aspect / Friction Factor Chart



## Fabrication Instructions

Measure the diagonal of the ductwork bend to obtain the cutting length of the 'Fastrac' fixing track for the aerofoil turning vane assembly.

From the first full tag, measure 30mm from the centre line of the fixing hole and cut the fixing track, ensuring that the first tag is left complete.

From the cut end measure the required length of fixing track less 30mm. From the last available full tag, measure 30mm from the centre line of the fixing hole and cut the fixing track. (Do not cut through the next tag)

Bend the tags 90deg on the fixing hole centreline ensuring they are bent in the same direction as the bead of the fixing track.

Cut the turning vanes using the internal height of the duct less 6 to 8mm. Push all the vanes onto one section of fixing track with the curve of the turning vane away from the opening left by the tag.

Beginning at one end, enter the first tag into the turning vane and progress along each tag until all of the tags are entered into the turning vane. Using a soft headed mallet with minimum force to gently tap the fixing tool onto each of the track tags until all are fully entered into the turning vane.

To connect the fixing track and turning vane together, insert the fixing tool into the fixing hole with the curved edge of the cutter towards the seam in the turning vane.

Again, use a soft headed mallet with minimum force to gently tap the fixing tool and cut the turning vane to lock it onto the fixing track tag.

Fit the completed turning vane assembly into the duct with the first turning vane set at 60mm from the inside throat of the bend.

It may be necessary to trim the fixing track after the last tag, before the completed turning vane assembly will fit into the duct in the correct position.

### Safety

Please make sure you are wearing adequate PPE clothing when handling any exposed metal edges as these can sometimes be sharp.

