

# DOUBLE DEFLECTION GRILLE - CURVED FACE UDCF2525

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## DESCRIPTION

The UDCF2525 curved face grille is designed for use in exposed spiral duct applications.

The front horizontal vanes control the rise and fall of the air pattern, typically used to direct warm air downwards or cooler air upwards.

The rear vertical vanes control the spread and throw distance of the air pattern.

The grille frame flush mounts directly onto the spiral duct which reduces labour and the cost of a saddle.

## CONSTRUCTION

The frame can be steel or aluminium with blades of extruded aluminium.

Curvature of grille to suit spiral duct diameter.

Standard finish is white satin (other finishes available on request).

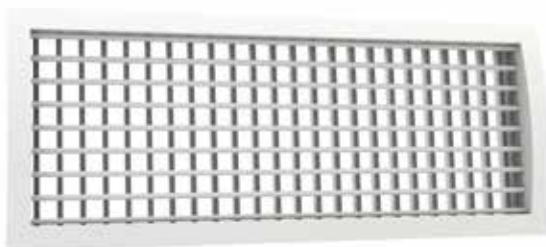
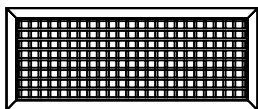
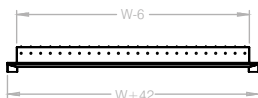
## OTHER MODELS

Single deflection.

## ACCESSORIES

Available with opposed blade dampers and stream splitter dampers.

## SECTION VIEWS



## FORMULA

A = Arc length

N = Straight neck height

R = Radius of the curve / spiro

X° = Central Angle

### Formula to calculate arc length of the cut-out for curved face grille

**Step 1:** Calculate X° using the formula below:

$$X^\circ = 2 \times \sin^{-1} \left( \frac{N}{2R} \right)$$

**Step 2:** Calculate A using the formula below:

$$A = \frac{X^\circ}{180} \pi R$$

### Formula to calculate projected neck height of the cut-out for curved face grille

**Step 1:** Calculate X° using the formula below:

$$X^\circ = \frac{A \times 180}{\pi R}$$

**Step 2:** Calculate N using the formula below:

$$N = 2 \times \left( \frac{X^\circ}{2} \right) \times R$$

