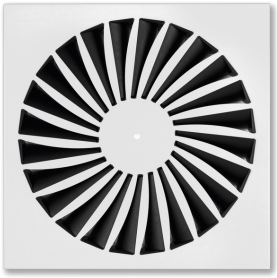
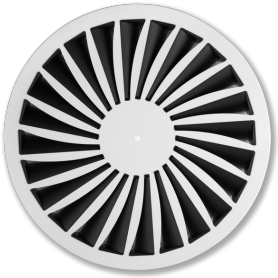
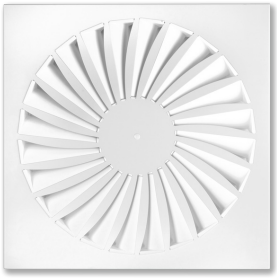
TROX® TECHNIK
The art of handling air



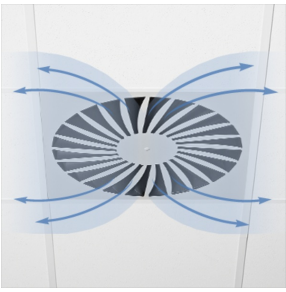
TDV-SA-Q-Z/600



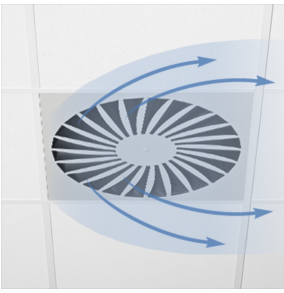
CIRCULAR DIFFUSER FACE



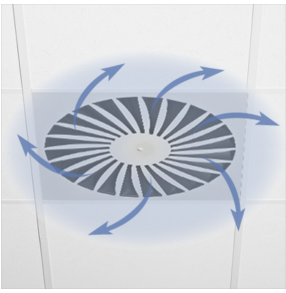
WHITE AIR CONTROL BLADES



HORIZONTAL TWO-WAY AIR DISCHARGE



HORIZONTAL ONE-WAY AIR DISCHARGE



HORIZONTAL SWIRLING AIR DISCHARGE

TDV-SILENTAIR

WITH VERY LOW SOUND POWER LEVEL FOR COMFORT

ZONES AND INDIVIDUALLY MANUALLY ADJUSTABLE AIR CONTROL BLADES

Circular and square ceiling swirl diffusers

- Nominal sizes 12, 16, 20, 24 in
- Volume flow rate range 23 - 627 cfm
- Diffuser face made of galvanized sheet steel, powder-coated
- For supply and extract air
- For variable and constant volume flows
- For all types of ceiling systems, and with an extended border also suitable for freely suspended installation
- High induction results in a rapid reduction of the temperature difference and airflow velocity
- Air control blades can be adjusted individually for adjusting the air pattern
- Ideal for comfort zones

Optional equipment and accessories

- Exposed diffuser face available in RAL CLASSIC colors, air control blades in black or white
- Horizontal or vertical duct connection
- Plenum box with cord-operated damper blade and pressure tap

Application

Application

- Type TDV-SilentAIR ceiling swirl diffusers are used as supply air or extract air diffusers for comfort zones
- Attractive design element for building owners and architects with demanding aesthetic requirements
- Horizontal swirling supply air discharge for mixed flow ventilation
- The efficient swirl creates high induction levels, thereby rapidly reducing the temperature difference and airflow velocity (supply air variant)
- Individually adjustable air control blades to meet individual requirements
- For variable and constant volume flows
- For supply air to room air temperature differences from –21.6 to +18 °F
- For room heights up to 13.3 ft (lower edge of suspended ceiling)
- For all types of ceiling systems
- With an extended border also suitable for freely suspended installation (supply air variant)

Special characteristics

- Very low sound power level, ideal for comfort zones
- Individually manually adjustable air control blades
- For all types of ceiling systems, and with an extended border also suitable for freely suspended installation
- Black or white air control blades

Nominal sizes

- 12, 16, 20, 24

Description

Variants

- TDV-SA-Q: Square diffuser face
- TDV-SA-R: Circular diffuser face
- TDV-SA-*-Z: Supply air
- TDV-SA-*-A: Extract air

Connection

- H: Horizontal duct connection
- V: Vertical duct connection

Parts and characteristics

- Circular or square diffuser face
- Diffuser face with individually manually adjustable air control blades
- Simple installation of the diffuser face due to central fixing screw with decorative cap
- Damper blade for volume flow rate balancing (optional)

Attachments

- M: Damper blade for volume flow rate balancing
- MN: Pressure tap and cord-operated damper blade for volume flow rate balancing with the diffuser face in place

Accessories

- Lip seal

Construction features

- Inlet suitable for circular ducts to ANSI/SMACNA 006-2006 and EN 1506 or EN 13180
- Inlet with groove for lip seal (if accessory lip seal has been ordered)

Materials and surfaces

- Diffuser face made of galvanized sheet steel
- V, H: Plenum box and cross bar made of galvanised sheet steel
- X: Plenum box made of plastic and galvanized sheet steel
- Air control blades made of plastic, UL 94, V-0, flame retardant
- Lip seal made of rubber
- Exposed diffuser face powder-coated RAL 9010, pure white
- P1: Powder-coated, RAL CLASSIC colour
- Air control blades for supply air similar to RAL 9005, black; extract air variant without air control blades
- Q11: Air control blades for extract air similar to RAL 9005, black
- Q21: Air control blades for supply air and extract air similar to RAL 9010, white

Standards and guidelines

- Sound power level of the air-regenerated noise measured according to EN ISO 5135

Maintenance

- Maintenance-free as construction and materials are not subject to wear
- Inspection and cleaning to VDI 6022