**Specifications of the WKD 381**

**1- Description and physical characteristics**

1.1 The swirl air diffuser shall be made of steel. The square or round diffuser shall be equipped with an ajustable nozzle to guide the air flow.

1.2 The diffuser shall be equipped with a turbulence chamber composed of a round plate with vertically placed UL94 certified eccentric rollers.

1.3 The diffuser adjustment mechanism shall be available in manual and motorized mode.

1.4 The diffuser shall be powder coated with a polyester TGIC-free paint, providing a smooth, easy-to-clean, chip and fade resistant finish. The architect or client shall choose a standard colour from the RAL colour chart.

**2 - Performance**

2.1 The performance shall be guarantee by using performance curves or simulation software for critical areas. These shall indicate the pressure drop, acoustic power it generates as well as showing a cross-sectional view illustrating the critical airflow path in cooling, isothermal and heating modes with a rated speed at 1.8 m (6 ft) from the ground in occupied area or as requested by the engineer.

**3 - Installation**

3.1 The swirl diffuser shall be mounted on a galvanized steel plenum supplied by the manufacturer.

**4 - Balancing**

4.1 The balancing of the diffuser shall be executed by a ventilation system balancing technician holding a certificate of qualification.

**5 - Quality Requirements: NAD Klima, model WKD 381**