**SRA specifications**

**1. Description and physical characteristics**

1.1 The high induction duct diffuser shall be made of 22 ga brushed steel for ducts dimensions inferior to 508 mm in diameter, and 20 ga for dimensions superior or equal to 508 mm.

1.2 The SRA will be available in dimensions ranging from 152 mm to 1219 mm for widths and heights and the lenght ranging from 1000 to 1450 mm.

11.3 The duct diffuser shall be painted with a TGIC free polyester powder coat. It shall have a smooth surface for easy cleaning. The colour shall be chosen by the architect or the customer. The paint of the diffuser shall be guaranteed against peeling for a minimum period of 5 years when used under normal conditions.

1.4 The duct diffuser shall be supplied with slots containing UL94 certified ABS (black or white) eccentric rollers or nozzle rollers. The 100 mm long eccentric rollers shall be alphanumerically identified allowing for the adjustment of the air flow pattern over 180 degrees.. The nozzles rollers will be opened or closed.

1.5 The duct shall have as smooth as possible surface, without sleeve to maintain an esthetic appeal

1.6 A reducer fitting or perforated balancing damper with a self locking mechanism allowing for an output between 25% and 100%, shall be installed after a maximum of 5 consecutive active sections of the same dimensions. A slot register shall be integrated to the last active section of the system.

1.7 The duct diffuser can be passive, without slots.

**2. Installation and suspension**

2.1 The DRA duct can be screwed directly to the ceiling by the holes provided for this purpose. The suspension screws will be supplied by the installer.

2.2 When required, the suspension of the duct diffuser shall be available in three options.

 2.2.1 Rail suspension

 The duct diffuser shall be slid into an steel rail suspended, offering a solution for varied types of

ceilings. The rail shall be painted according to the RAL colour chart and chosen by architect or customer.

2.2.2 Suspension by metallic cable

The duct diffuser shall be suspended bymetallic cable (aviation style) 7 X 7 or 7 X 9 of galvanised or stainless steel (304 or 316) of medium or high traction resistance.

2.2.3 Suspension by threaded rods (3/8 ") provided by the installer. The threaded rods may be covered with rod covers supplied by the manufacturer of the diffuser. The color of the rod cover according to RAL color chart, will be the choice of the architect or the customer.

2.3 When the duct diffuser goes through a wall, a collar adapted to the duct diffuser shall be supplied by the manufacturer.

2.4 The standard accessories shall have the same finish as the duct diffuser (elbows, sleeves, reducers, branches, etc.)

2.5 Each diffuser shall be identified with a label. This label shall contain the section number, the direction of the air flow, the number of slots and the positioning of the eccentric rollers.

**3. Performances**

 The manufacturer shall supply for approval the following :

3.1 Performance curves indicating the air velocity in the distance, the pressure loss and the sound power level generated by the diffuser.

**4. Adjustment**

4.1 The adjusting of the eccentric rollers shall be done by the manufacturer according to the required output.

4.2 The adjustment of the eccentric rollers shall be possible even after the installation of the diffuser in order to meet new output requirements.

**5. Balancing**

5.1 The balancing of the diffusers shall be done by a ventilation balancing technician, accredited as a qualified professionnal.

5.2 When required, the technician shall refer to the eccentric roller adjustment mode available in the manufacturers’ reference manual.

**6. Required quality : NAD Klima model SRA**