

# Consultant Specification: Metal Ducting with Integral Stiffeners & Socket Seal Joints

The ducting shall be fabricated from high-quality galvanised steel, designed with integral stiffeners for enhanced structural integrity, rigidity and reduced air leakage performance. The ducts shall be suitable for use in residential ventilation systems and work and be installed in conjunction with PVC ducting.

### **Duct Material:**

- Galvanised steel sheet with a minimum thickness of 0.6mm.
- The finish should be smooth, free from defects, corrosion-resistant, and long-lasting

## **Construction:**

- The ducting shall incorporate integral stiffeners formed during metal during fabrication
- Integral stiffeners shall be spotwelded into female duct fittings
- All corners and joints shall be precision-manufactured with mechanically fastened seams to ensure airtightness and mechanical strength.

#### **Connections:**

• Ducting shall be manufactured with socket seals where female fittings are manufactured to slip over male fittings to eliminate bowing and sagging at connection

#### **Dimensions & Tolerances:**

- Internal Dia (w x h) Available in 300x100mm 300x125mm, 400x100mm and 400x 125mm
- Custom lengths and sizes available upon request.
- Dimensional tolerance: ±3mm

#### **Performance Requirements:**

• The ductwork shall be designed to operate within a pressure range of ±200Pa.

#### **Installation Requirements:**

• All joints must be sealed with approved mastic and sealing tape to prevent air leakage in accordance with best practice installation guide

#### **Testing & Quality Control:**

• Visual inspection of all welds and seams to ensure compliance with quality standards.

#### **Compliance Standards:**

- The ducting system must comply with DW144 for sheet metal ductwork.
- The ducting system should be independently tested for resistance and air leakage performance