

# FAQ

## Tailored Air Distribution

Question:

### What is the embodied content of fabric ducting?

Answer:

The embodied energy of Prihoda's standard NMI polyester fabric is calculated as **16.56 MJ/m<sup>2</sup>**. This makes fabric ducting a significantly lower-impact option compared to traditional materials such as sheet steel.

#### / How we calculate embodied energy

Using recognised published data, our embodied energy values are based on material type and weight:

##### For Prihoda NMI polyester material:

- Embodied energy of polyester: **72 MJ/kg**
- Fabric weight: **0.23 kg/m<sup>2</sup>**
- Result: **16.56 MJ/m<sup>2</sup> (72 × 0.23)**

##### For galvanised sheet steel:

- Embodied energy of steel: **39 MJ/kg**
- Sheet weight: **7.89 kg/m<sup>2</sup> (20-gauge steel)**
- Result: **307.71 MJ/m<sup>2</sup> (39 × 7.89)**

#### / Conclusion

This means that **1 m<sup>2</sup> of steel ducting contains over 18 times more embodied energy** than 1 m<sup>2</sup> of polyester fabric ducting. That's a major difference when considering environmental impact and sustainability in ventilation system design.

#### Data sources:

- Hammond & Jones (2008), Embodied Energy and Carbon in Construction Materials
- Dartmouth College Materials Data
- Red Cross Steel Conversion Tables
- Prihoda material specifications

## Key terms:

embodied energy; embodied carbon; fabric ducting sustainability; polyester duct material; HVAC carbon footprint; low-impact ventilation; building material comparison; galvanised steel vs fabric; environmental product declaration (EPD); lightweight HVAC materials; sustainable ventilation design; material lifecycle impact; green building HVAC choices; Prihoda NMI fabric



to learn more about the environmental impact of our materials and access EPDs for recycled fabric options, visit our [Certificates page](#) or contact our technical team via [info@prihoda.com](mailto:info@prihoda.com)



Engineered air  
distribution



Quick and easy  
installation



Fast  
delivery



Easy  
Maintenance



Custom  
design



Long  
Warranty