

TM65 Mid-Level Calculation

UB-1070

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|-------------------|--------------------------------------|
| Site name | Norfolk Bridge Works |
| Site address | 11 Leveson Street, Sheffield, S4 7ER |
| Products per year | 615 |



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|-----------------|----------------------------|
| Assessment date | 26/07/2022 |
| Assessor | Tasha Lyth |
| Organisation | Gripple Ltd |
| Contact | sustainability@gripple.com |

Embodied carbon result with 'mid-level TM65 calculation' method total:

8.948 (kg CO₂e)*

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|---|---|
| Type of product | MEP supports and bracketry |
| Capacity of equipment (M) | 1.07 m |
| Product weight (kg) | 1.85 kg |
| Material breakdown for at least 95% of the product weight (Y/N) | Y |
| Service life of the product (years) | 25** |
| Types of refrigerant | N/A |
| Refrigerant GWP | 0.00 kg |
| Energy consumption of the factory per unit of product (kWh) | 0.70 kWh: Electricity, natural gas |
| Location of manufacture | Sheffield, UK |
| Product complexity | Category 1: See CIBSE TM65 table 4.3 |



*Figure reached using 'Mid-Level' TM65 calculator

**Product service life when installed in accordance with Gripple key recommendations, 25 year extended product warranty available at Technical Services discretion.

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8.948 (kg CO₂e)*

Embodied carbon results breakdown (kg CO₂e)

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|-------------------------|----------------------------|---------------------|
| A1: Material extraction | 5.503 kg CO ₂ e | TM65 assumption |
| A2: Transport | 0.367 kg CO ₂ e | TM65 assumption |
| A3: Manufacturing | 0.168 kg CO ₂ e | |
| A4: Transport to site | 0.073 kg CO ₂ e | TM65 assumption |
| B1: Use | 0.000 kg CO ₂ e | TM65 leakage type 0 |
| B3: Repair | 0.570 kg CO ₂ e | TM65 assumption |
| C1: Deconstruction | 0.000 kg CO ₂ e | TM65 leakage type 0 |
| C2: Transport | 0.024 kg CO ₂ e | |
| C3: Waste processing | 0.168 kg CO ₂ e | |
| C4: Disposal | 0.008 kg CO ₂ e | TM65 assumption |

Embodied carbon results - without refrigerant leakage (kg CO₂e)

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| A1-C4 (excluding B1,C1) | 6.883 kg CO ₂ e |
| A1-C4 with Buffer Factor (excluding B1, C1) | 8.948 kg CO ₂ e |

Embodied carbon result - refrigerant leakage only (kg CO₂e)

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| B1 (Refrigerant leakage during use) + C1 (Refrigerant leakage end of life) | 0.000 kg CO ₂ e |
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Assumptions

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| A1: Material carbon coefficient source | Source = CIBSE TM65 table 2.1 |
| B1: Refrigerant annual leakage rate (%) | 0%: Source = CIBSE TM65 table 4.13 type 2 |
| C1: Refrigerant end of life recovery rate (%) | 100%: Source = CIBSE TM65 table 4.13 type 2 |
| B3: Materials replaced as part of repair (%) | 100%: Source = CIBSE TM65 |
| C4: Percentage of product going to landfill (%) | 50%: Source = CIBSE TM65 |

*Figure reached using 'Mid-Level' TM65 calculator **25 years for project work as decided by Gripple Technical Services