

Declaration of Performance
No: PD04 – Pollington Box Culverts (Version 2)

1. *Unique identification code of the product type:*

Precast concrete products – Box culverts

2. *Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11(4) of the CPR:*

Box culverts of rectangular cross-section formed monolithically and designed as continuous elements with a joint detail shaped to allow the possible incorporation of sealing materials (see individual product markings for size, manufactured date and project reference)

3. *Intended use or uses of the construction product, in accordance with the applicable harmonised technical specification, as foreseen by the manufacturer:*

For the creation of voids below ground for the conveyance and storage of materials e.g. conveyance and storage of wastewater, cable tunnels and subways

4. *Name, registered trade name or registered trade mark and contact address of the manufacturer as required under article 11(5):*

Marshalls CPM, Pollington, Goole, East Riding of Yorkshire, DN14 0DU

5. *Where applicable, name and contact address of the authorised representative whose mandate covers the task specified under Article 12(2):*

Not applicable

6. *System or systems of assessment and verification of constancy of performance of the construction product as set out in CPR, Annex V:*

System 4

7. *In case of the declaration of performance concerning a construction product covered by a harmonised standard:*

BS EN 14844: 2006

8. *In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:*

Not applicable

9. Declared Performance:

Essential characteristics	Performance	Harmonised technical specification
Compressive strength (of concrete)	40 MPa (N/mm ²)	EN 14844:2006 clause 4.2
Ultimate tensile and tensile yield strength (of steel)	Ultimate tensile strength $f_{tk} = 575 \text{ N/mm}^2$ Tensile yield strength $f_{yk} = 500 \text{ N/mm}^2$	EN 13369 clause 4.1.3
Load bearing capacity (by tests) or mechanical strength (by calculation)	Method 2 - designed to meet LM1-3 loading in accordance with BS EN 1991-2. Where H (internal height) max = 3.0m/min = 0.4m	EN 14844:2006 clause 4.3.3
Detailing	Units with rebated joint (type A) <u>Tolerances:</u> Thickness of roof/floor slab: $\pm 10\text{mm}$ Internal width/height of opening: $\pm 1\%$ (max 15mm) Length of units: $\pm 1\%$ Joints: $\pm 6\text{mm}$ Technical documentation available	EN 14844 clause 4.3.1 and clause 8
Durability against corrosion	Suitable for use in exposure class XD3 environment	EN 14844:2006 clause 4.3.7
Durability against freeze-thaw (for exposed applications)	NDP	EN 14844:2006 clause 4.3.4
Drying shrinkage (in end use conditions and only for lightweight concrete)	NDP	EN 14844:2006 clause 4.2.2.3

10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9.

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

Name: Mark Flavell

Position: Technical Director

Signed:



Date: 04.09.2019

Place of issue: Wombourne, West Midlands, UK