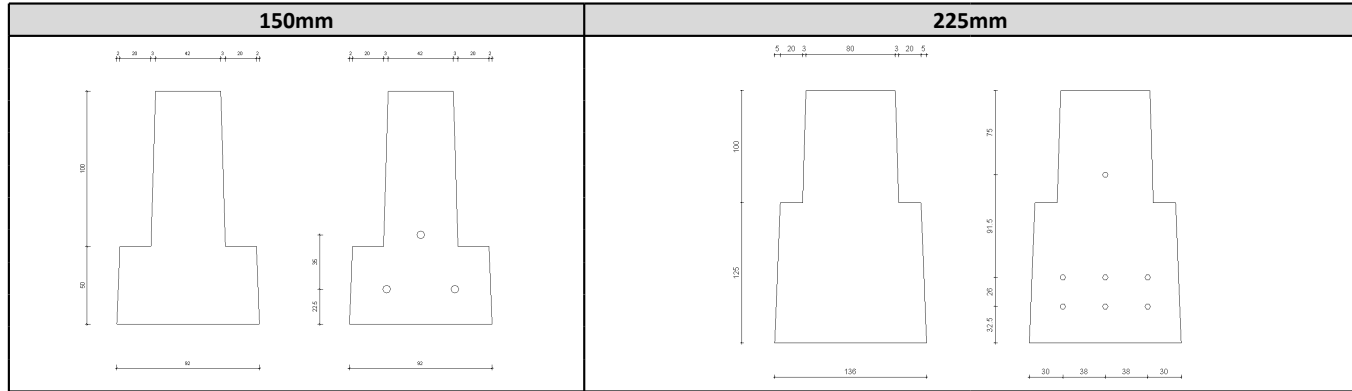


Steel	150mm	225mm
Steel yield strength of wire, $f_{pk}$	1770 N/mm <sup>2</sup>	
Young's modulus of wire, $E_p$	205 kN/mm <sup>2</sup>	
Diameter of wires in each row (mm)	5 mm	

Concrete	150mm	225mm
Transfer mean compressive cube strength, $f_{cm}(t)$	40 N/mm <sup>2</sup>	30 N/mm <sup>2</sup>
Concrete cylinder strength at 28 days $f_{ck}$	55 N/mm <sup>2</sup>	
Young's modulus at transfer, $E_{cm}(t)$	33.3 kN/mm <sup>2</sup>	
Young's modulus at 28 days (gravel aggregate), $E_{cm}$	38.2 kN/mm <sup>2</sup>	



	Constants	
	150mm	225mm
Cross-sectional area $A_c$ (mm <sup>2</sup> )	9000	24675
Height to centroid, $y_b$ (mm)	61.9	99.6
Breadth at top (mm)	42	80
Width (mm)	92	136
Depth (mm)	150	225
Second moment of area $I_{x-x} \times 10^6$ (mm <sup>4</sup> )	17.03	98.18
Section modulus top, $Z_t$ (mm <sup>3</sup> )	193170	985589
Section modulus bottom, $Z_b$ (mm <sup>3</sup> )	275294	782977

	150mm	225mm
<b>Servicability Limit State</b>		
$M_{sR}$ for exposure XC1 (kNm)	4.78 to 5.20	16.11 to 16.62
$M_{sR}$ for exposure XC3 (kNm)	3.72 to 4.06	12.16 to 12.57
<b>Ultimate Limit State</b>		
Ultimate moment of resistance, $M_{Rd}$ (kNm)	6.85	24.1
Ultimate shear capacity, $V_{Rd,c}$ (kN)	12.47	32.21

Declaration of Performance		
No.	2797 CPR 593841	
Identification Code	150 mm Deep	225 mm Deep
Intended Use	Flooring	
Manufacturer	Litecast Limited, Purley Chase Estate, Nuneaton, CV10 0RG	
Authorised Representative	Not applicable	
Relevant Harmonised Standard	BS EN 15037-1:2008	

Essential Requirements (not covered above)	Declared Performance	
Surface characteristics	Not described	
Conditions for durability (BS EN 13369:2018 Annex A)	Condition C - moderate - XC2/3	
Resistance to fire (for load bearing capacity) (minutes)	Nil using single beams R60 using double beams	R60 using single beams R90 using double beams

The performance of the product identified above is in conformity with the declared performance above.

The declaration of performance is issued under the sole responsibility of the manufacturer identified above.

Signed on behalf of the manufacturer by:

Guy Schofield

Technical Manager

(Name and function)

21/03/2022

(Place and date of issue)

Signature