



**EUROPEAN COMMISSION
DG RESEARCH**



**SIXTH FRAMEWORK PROGRAMME
Sustainable Surface Transport**

Sustainable Pavements for European New Member States



ANNEX D: LOAD EQUIVALENCY POWERS

Deliverable D.12: Recommendations for traffic equivalency factors

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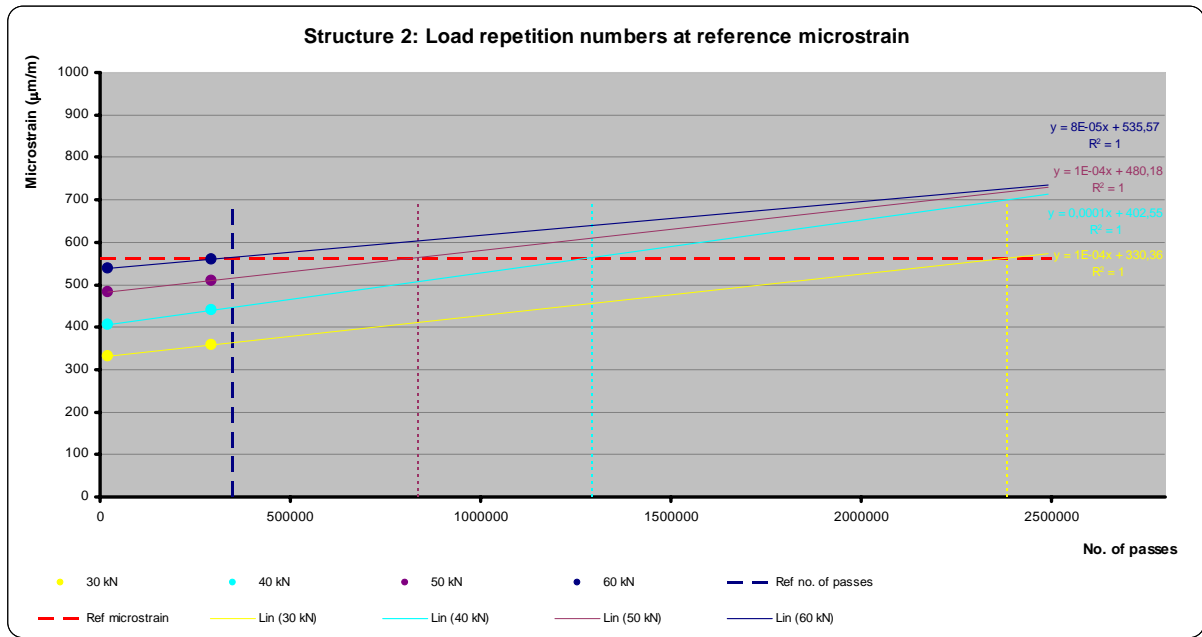


Figure 1 Structure 2, critical load repetition numbers

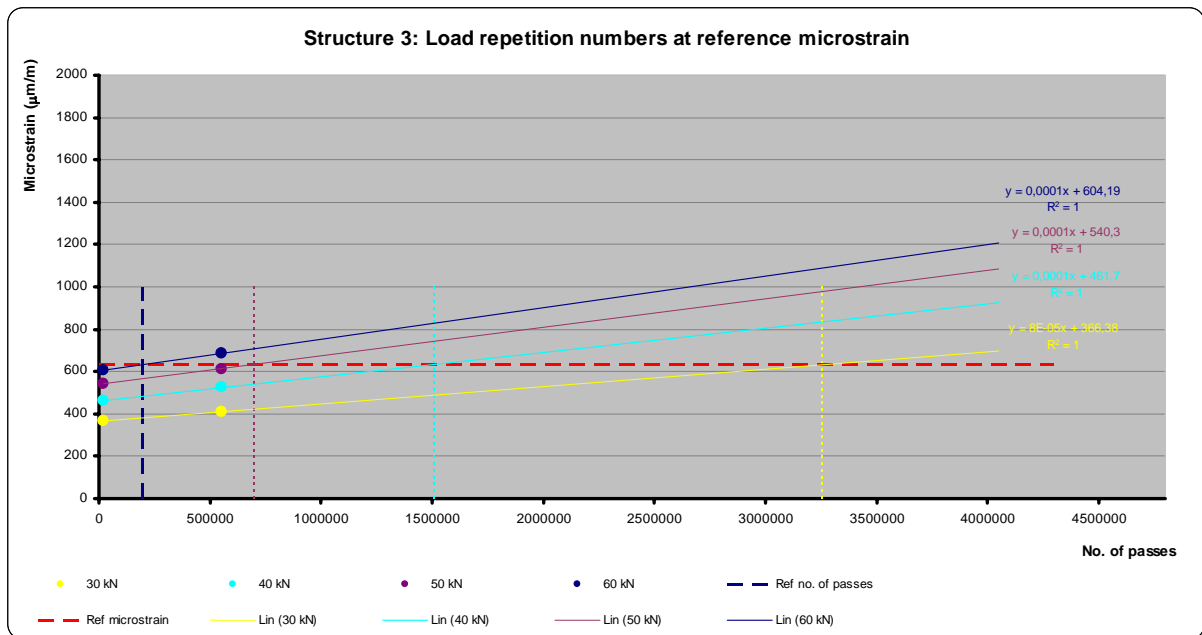


Figure 2 Structure 3, critical load repetition numbers

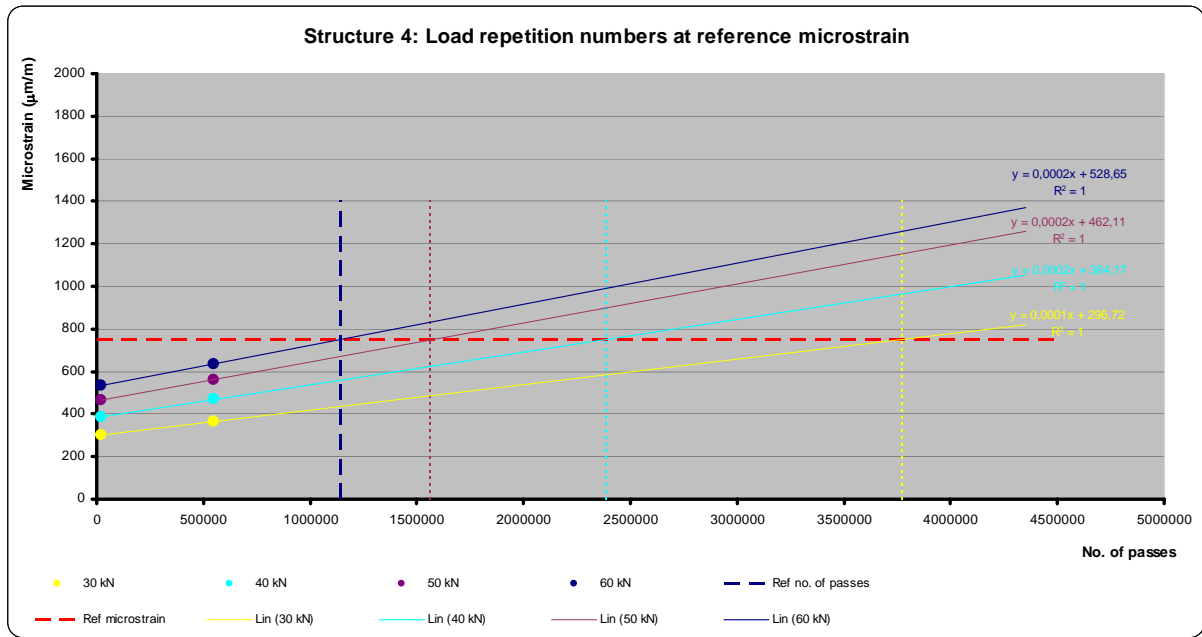


Figure 3 Structure 4, critical load repetition numbers

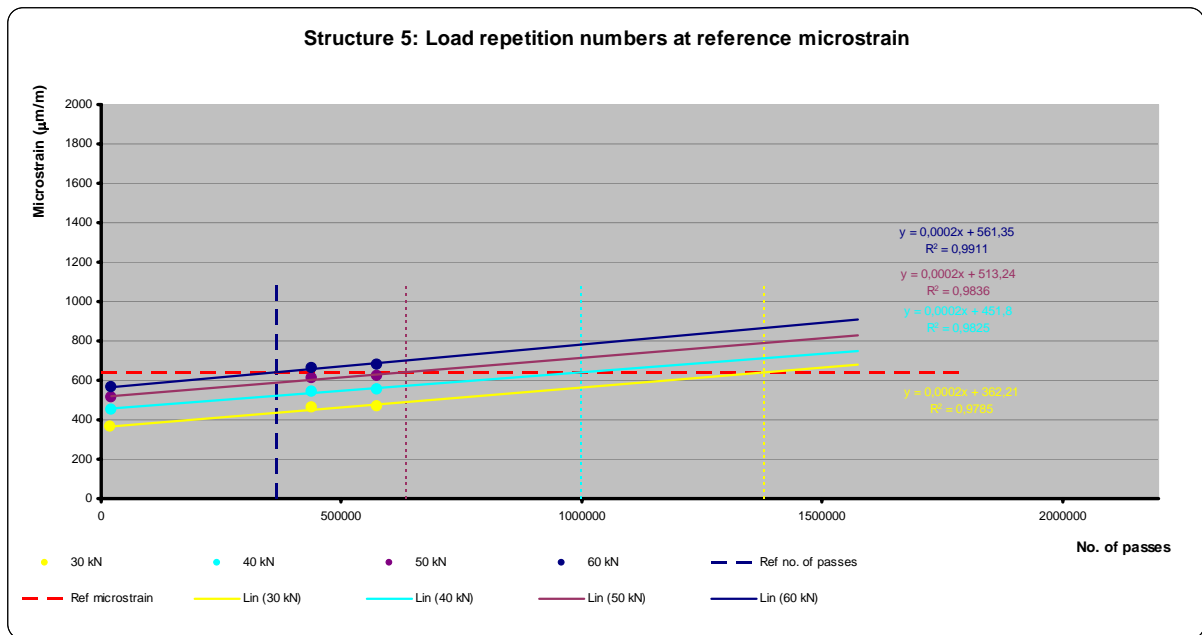


Figure 4 Structure 5, critical load repetition numbers

In the following figures, the numbers next to the structures indicate thicknesses of respective asphalt layers.

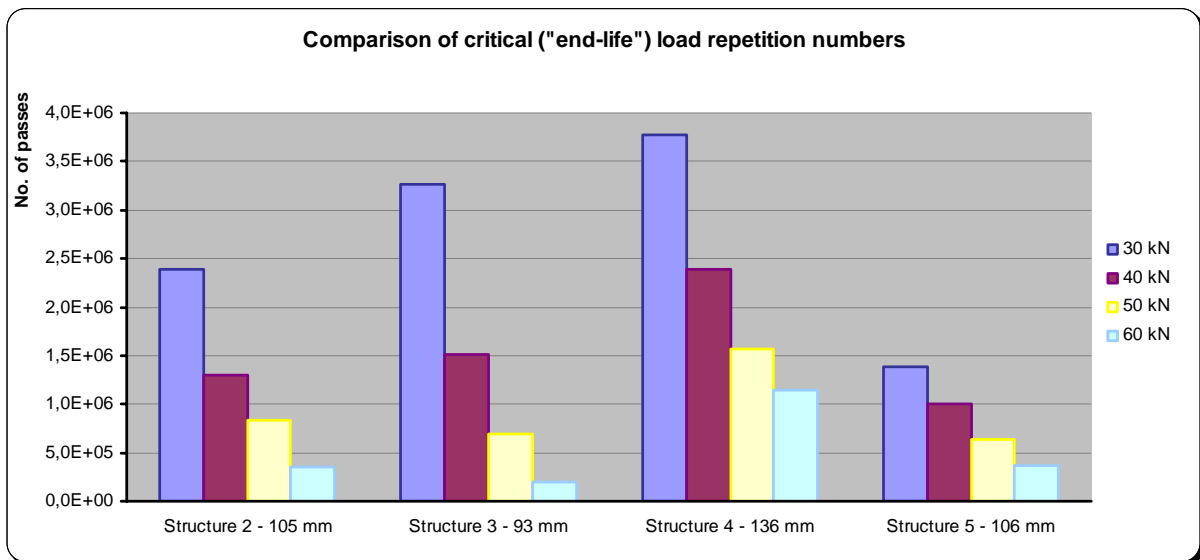


Figure 5 All structures, critical load repetition numbers

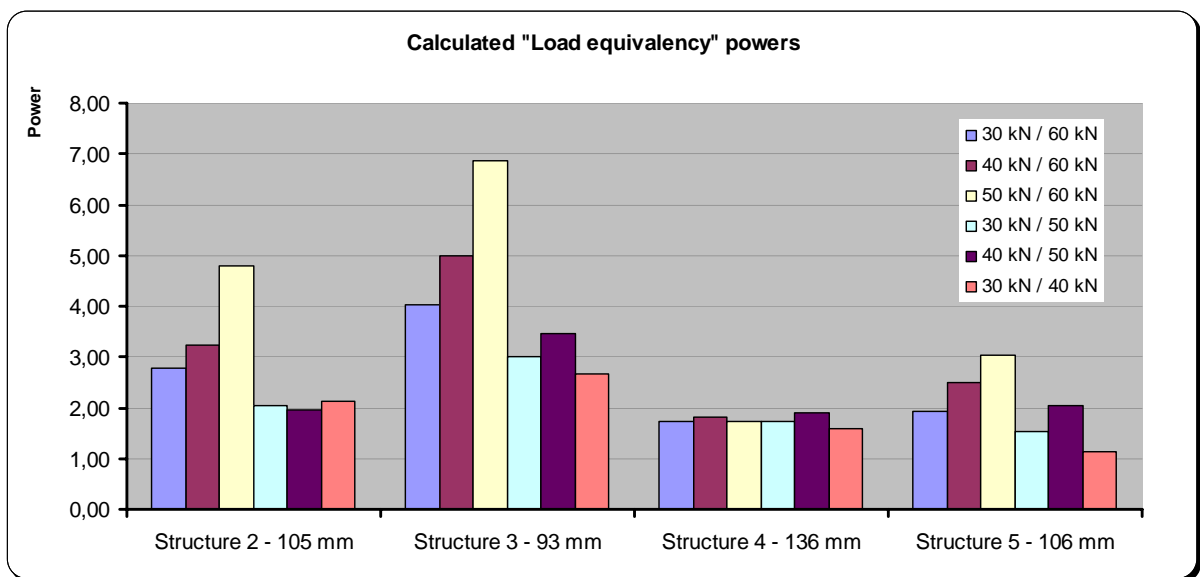


Figure 6 Load equivalency powers

Table 1 Calculated load equivalency powers for different load ratios

Structure	Wheel load ratio					
	30 kN / 40 kN	30 kN / 50 kN	30 kN / 60 kN	40 kN / 50 kN	40 kN / 60 kN	50 kN / 60 kN
Structure 2 - 105 mm	2,13	2,05	2,77	1,95	3,23	4,80
Structure 3 - 93 mm	2,73	3,12	4,38	3,62	5,56	7,92
Structure 4 - 136 mm	1,70	1,88	1,94	2,10	2,10	2,11
Structure 5 - 106 mm	1,27	1,73	2,27	2,33	2,99	3,79
Structure 6 - 108 mm	0,17	0,77	0,96	1,55	1,52	1,47