

Evaluation of slipperiness of WPC-Decking according to EN 15534-4

Scope

Slipperiness is the property of a floor surface, which characterises how easy human beings can slip during walking. Slipperiness of decking boards made from WPC is evaluated according EN 15534-4 and EN 15534-1. The standard EN 15534-4 requires a minimum slip resistance of $\geq 36 \mu$.

Client

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Material:

Material is a WPC-decking board in form of a hollow profile. Product name from IDECK is "DURO".



Figure 1: Example of WPC decking profile DURO.

Methods:

Test is designed according EN 15534-4 chapter 4.4 (method "a" from table 1) for decking boards carried out according EN 15534-1 chapter 6.4.2. General principle is pendulum, which slides over the wet specimens surface and the resistance against sliding is measured. 5 replicates and 3 measurements each replicate are used. Hardness of slider was 55.

Results:

Results are summarised in table 1. All replicates exhibited higher values as required from EN 15534-4. Therefore the material passes the test regarding slipperiness.

Table 1: Result of slipperiness of WPC-deckings.

| direction | mean value [μ] | standard deviation [μ] | requirement [μ] | evaluation |
|-------------------------------|-------------------------|---------------------------------|--------------------------|------------|
| extrusion | 60 | 4,1 | ≥ 36 | pass |
| perpendicular to extrusion | 58 | 3,7 | ≥ 36 | pass |