

Skeleton outline of published article

"Paving Design: Is rigid-fix external stone paving the way to go?"

Abstract

Introduction

(a) **Factors that commonly assume a secondary role in paving integrity**

1. Stone composition including clays
2. Stone strength - including alteration
3. Stone colour - brown is alteration
4. Imbibition coefficient/porosity
5. Thermal conductivity
6. Heat retention of concrete base and stone
7. Thermal expansion - especially engineered stone
8. Stone growth
9. Climate

(b) **Critical factors that can influence the integrity of rigid-fix paving**

1. Instability of the concrete base
2. Curing/shrinkage of the concrete base
3. Screed
4. Expansion joints
5. Size, thickness and shape of the stone pavers
6. Laying pattern of the stone
7. Adhesive - check thickness, wetness, additive
8. Jointing width and jointing material
9. Dynamic loading/torsional effect on pavers
10. Influence of salts
11. Influence of water
12. Sealers
13. Workmanship

Summary

References

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