ASSOCIAÇÃO PORTUGUESA DAS EMPRESAS DE BETÃO PRONTO

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IPAC acreditação
L0040
Ensaios

RELATÓRIO DE ENSAIO

Processo: P14/01271 **Ensaio:** 3505 **Relatório:** P14/003089 **Data:** 18-03-2015

CONCRETE
Depth of penetration of water under pressure

Marca: --
Designação: C30/37 S3 XC4 (P) D22 Cl 0,1 HID

Requerente: OAU2WORK+, Lda

Obra: --

Identificação: Dois cubos 15x15

Pedido: Guia de Remessa de 03/11/2014
Data de Entrada: 03-11-2014

NANO4LIFE-IBERICA
Pedro Rodrigues
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Edifício Nova Centralidade, S/N
4465-226 Matosinhos

DIRECTOR DE SERVIÇOS LABORATORIAIS — *João André*

TÉCNICO DE BETÃO — *Paulo José*

Test Specimen		Date of the test		Maximum depth of penetration (mm)
Identification	Description	Start	End	
1-N4STONE	Specimen cubic. Nominal sizes: 150 mm	03-11-2014	06-11-2014	33
2-PADRÃO	Specimen cubic. Nominal sizes: 150 mm	03-11-2014	06-11-2014	85

Direction of application of water pressure with respect to the casting direction: perpendicular.

Test carried out according to standard EN 12390-8: 2009.

Specimen delivered by the customer.

The test results relate only to the items tested.
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CERTIFICATE EXPLANATION: A.P.E.B. - **A**ssociação **P**ortuguesa das **E**mpresas de **B**etão Pronto (TRANS.: Portuguese Association for Concrete Producers) is one of most reputated institution in Portugal that certifies concrete production and all materials necessary to do it. They are members of E.R.M.C.O.-European Ready Mixed Concrete Organization and other European organizations.
The lab test that we order consists in creating two standard concrete cubic samples with the dimension of 150mmx-150mmx150mm
One of them identified by "Provete **1-NANO4-STONE"** on the certificate report, was coated in one surface with 15g of **NANO4-STONE** and the second identified by **"Provete 2-PADRAO"** without coated .
After this, both cubic samples where submitted to a continuous hydrostatic pressure of 5 bar during 72 hours.
The result was awesome. **NANO-4STONE** improved by 2.5 times more the resistance to water pressure in this particular concrete composition " C30/37 " (Class of concrete resistance at 28 days in MPA) " S3" (Class of workability/fluidity with a "SLUMP" cone test) " XC4"(Environmental class- that obligates a minimum amount of cement or thin materials) This particular reference of concrete " C30/37S3XC4 ".