## RDL - A new dawn in regulation compliance

Professor Sean Smith Professor of Construction Innovation

### RDL - A new dawn in

Regulation Compliance

## Sound Insulation in Housing

A brief

HISTORY

Data pre 2004

# Some KEY STATISTICS

### 1990 to 2000

NOISE COMPLAINTS by SECTOR\_\_\_\_\_

Industrial / commercial noise up 30 %

Residential noise complaints up 300 %

Primarily for existing housing and low frequency sounds



#### PRE-EXISTING HOUSING

Never designed for 21st century lifestyle

Difficult to alter for sound insulation

No building regulatory process available

Government wanted to address noise

So they initiated regulations on NEW BUILD

**2001** \_\_\_New Part E Consultation

Gov. wanted min. 10% of site to be tested

But was actually 20 to 50% of site

Never enough testers

Large knowledge gap for sector

2002 \_\_\_\_\_

HBF asked Gov. to consider a Robust Detail approach

"Improved insulation fabric for the lifetime of the building"

"Would improve quality of life and not require same PCT Testing regime" RSD Project.....

2002 - 2003

### £1 million

Funding

From major

Homebuilders

### Industry builds

1,400
Innovative New homes
In 9
months

### Napier University

Tracks

# 1.3 million Data points

In 6 months

### 175 test construction sites!

Across the UK

+7 dB better than regs

13 RDs assessed

### 2004

### New

# Robust Details Approach Announced



### **RDL Launched:**

Alternative to PCT

30 Expert Inspectors

Regional and National

Most in-depth global database!

## Robust Details - 2004 17

### Robust Details – by year

2006 23

2007 25

2008 36

2009 44

### What was the impact?

2004 - 2010



## 85,000 PCT journeys removed



4 fold DECREASE in Noise Complaints



£160 million saved in remedial measures



### 500,000 new RD homes built



£50 million saved not doing PCT

## Compliance Rate BEFORE RDs

35 - 50 %

WITH Robust Details

99 %

### 2009-10

### RSD Project

Awarded

Queen's Anniversary Prize



## To all our RD Clients & Customers

Thank you from Robust Details

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