

# *Neuma* fds.

presentation to



# What we will discuss today

- 🔥 What has happened with GRP composite fire doors since Grenfell?
  - 🔥 What was MHCLG's response?
  - 🔥 How did the industry respond?
  - 🔥 What is the current position?
- 🔥 Who are Fire Door Systems?
- 🔥 The testing journey
- 🔥 3<sup>rd</sup> Party Certification
- 🔥 Back to market – Proven, Consistent, Compliant

# Post Grenfell Tower – Composite Flat Entrance Fire Door Sets

- 🔥 During the post-Grenfell investigation by the Metropolitan Police, they:
  - 🔥 Removed two undamaged flat entrance doors, manufactured by Manse Masterdor, from areas that were not affected by the fire and subjected them to BS 476-22 fire testing
  - 🔥 Test results showed the doors failed at about 15 minutes
  - 🔥 The failure was reported to Ministry of Housing, Communities and Local Government (MHCLG)
- 🔥 MHCLG carried out a series of BS 476-22 fire-tests on a number of other Manse Masterdor door sets removed from existing installation
  - 🔥 Tests were carried out with the door sets opening into the furnace
  - 🔥 The results showed inconsistency in results of between 14 and 40 minutes

# Post Grenfell Tower – MHCLG Response

- 🔥 Based on the Manse Masterdor results MHCLG embarked on a testing program for door sets from other fire-resistant door set manufacturers
- 🔥 Prior to the Grenfell Fire, it was accepted practice that fire door testing should be carried out with the door hung such that it opened-in towards the furnace – testing from both sides was not required
  - 🔥 Single directional testing was based on experience of test houses showing opening into the furnace was the most onerous direction and BS 476-20
- 🔥 Based on Annex B of Approved Document B, MHCLG stated that tests should be conducted on two door sets, one hung opening into and one hung opening away from the furnace
- 🔥 Test results showed some inconsistency in results

# Post Grenfell Tower – Response by Expert Panel and NFCC

- 🔥 Following the test program, the MHCLG Expert Panel formed following the Grenfell Tower fire and the National Fire Chiefs Council (NFCC) have stated that the risk posed by these fire doors remains LOW
- 🔥 During the investigation following Grenfell, it was found that over 50% of the door closers fitted to the flat entrance doors were either disconnected or removed
- 🔥 The Expert Panel stated that the greatest risk to life was the door closers either being non-functioning, disconnected or removed
- 🔥 Risk assessment should be undertaken to ensure those blocks of flats where significant risk is posed by the fire safety of the block, identifies those flat entrance doors that require priority maintenance, upgrading or replacement

# Post Grenfell Tower – MHCLG Questions to the Industry and ACDM

1. How will the industry prevent any more Composite Fire Resistant door sets with inconsistent fire test results from entering the market?
2. What actions will be taken to remediate those Fire Resistant Pedestrian Entrance door sets already installed?
3. How will the Industry demonstrate compliance with the Building Regulations to bring Composite Fire Resistant Pedestrian door sets back to the market?

# Post Grenfell Tower – Association of Composite Door Manufacturers responses

1. The ACDM agreed through it's membership to stop Composite Fire Resistant door sets supply to the market by:
  - i. Door manufacturers voluntarily removing these door sets from their sales offering
  - ii. Fire Resistant door blanks (leaf's) were removed from the sales offering by the blank manufacturers/distributors unless:
    - a) Fire Resistant door set manufacturers could produce fire test evidence showing doors had been tested from both sides
    - b) The MD of the manufacturer signed a declaration that the test evidence was genuine and any Fire Resistant door set they manufactured would be the same specification as the door- sets that were tested

# Post Grenfell Tower – Association of Composite Door Manufacturers responses

2. The ACDM agreed to work with MHCLG and other stakeholders to agree a method of assessing the risk posed to occupants and to agree the remediation required
  - i. This process is continuing and an expected risk assessment review process is expected to be agreed in the near future
  - ii. Once the process has been agreed, building owners and Fire Resistant door set manufacturers whose doors were tested by MHCLG and are members of the ACDM, will review the test results and agree the remediation works required (may not be the replacement of the existing door set but may be replacement of specific components that failed)
  - iii. This process will be piloted through the Local Government Association (LGA) and the National Housing Federation (NHF)
  - iv. Once agreed, ACDM members will carry out the works within an agreed timeframe



# Post Grenfell Tower – Association of Composite Door Manufacturers responses

3. The ACDM have agreed with members who manufacture Fire Resistant door sets that Third Party Certification is a requirement of ACDM membership
  - i. UKAS accredited certification bodies will develop certification schemes for Composite Fire Resistant door sets that will be robust and enable building owners to have confidence in the performance of the door sets
  - ii. A number of ACDM members are currently in the process of gaining third party certification with expected return to market late 2019 – early 2020
  - iii. The ACDM will develop their website to enable members to upload copies of their testing and certification and:
  - iv. Develop a specifiers section where manufacturers with the relevant test data and certification can be identified
  - v. Other performance requirements, such as security (PAS 24) will also be included

# Response to MHCLG consultation on 'Assessments in Lieu of Tests' (AiLoTs)



- 🔥 Following MHCLG consultation in April 2018 to consider the use of AiLoTs in developing a fire safety plan for a building
- 🔥 Considered the use of AiLoTs without or insufficient primary test evidence
- 🔥 Any Fire Resistant product need to have an assessment to enable extended application of the test results achieved, e.g. variations in size, glazing options etc.
- 🔥 Existing Global Assessments are now considered too extensive without the necessary level of control of substitution of components
- 🔥 New certification schemes will restrict the scope of substitution and assessments will need to be based on primary test evidence

# Who are Fire Door Systems?

- 🔥 We are part of the Distinction Group, that was formed in 2004, and is the largest supplier of GRP Composite Doors Blanks
- 🔥 Historically we have supplied components for fire door set manufacture through our sister company, Distinction Doors
- 🔥 In late 2018, we decided we wanted to offer a total system solution to meet the requirements of Approved Document B, underpinned by a 3<sup>rd</sup> Party Certification Scheme, to regulate control and deliver product consistency.

# What was our objective?

“To create a **COMPLIANT** system that is **PROVEN** to **CONSISTENTLY** exceed the requirements of our National Test Standards and meet the demanding European Test Standards delivering reassurance to all stakeholders.

The system **MUST** not only demonstrate integrity against **FIRE**, but also deliver performance relative to **SMOKE CONTROL, SECURITY, WEATHER, SOUND INSULATION** and **THERMAL PERFORMANCE**”.



FIRE



SMOKE  
CONTROL



SECURITY



WEATHER



SOUND  
INSULATION



THERMAL  
PERFORMANCE

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# Have we achieved our objectives?

- 🔥 44 door sets have been tested for fire resistance bi-directionally since February 2019 offering a **PROVEN** and **CONSISTENT** solution
- 🔥 All 44 were independently tested to EN1634:-1:2014 fire resistance by UKAS (or European equivalent) test houses
- 🔥 Tests were conducted in 3 countries, using 3 variations of supporting construction
- 🔥 Delivering not only solid door leaf options...
- 🔥 But glazed leaf options too...
- 🔥 Either with or without overhead fan lights
- 🔥 All door sets were tested with letter plates, viewers and door closers included
- 🔥 All featured auto throw locks



# Have we achieved our objectives?

- 🔥 We successfully achieved EN1634-3:2004 in July 2019
- 🔥 Satisfying the requirements of Approved Document B of Building Regulations



# Have we achieved our objectives?

- 🔥 We successfully passed PAS24:2016 Enhanced Security testing in July 2019
- 🔥 A pre-requisite in attaining Secured by Design (SBD) certification
- 🔥 All submitted samples featured the same letter plates, viewers, and auto-throw lock to underpin the need for **CONSISTENCY** in testing





# Have we achieved our objectives?

- 🔥 We successfully tested to BS6375 Weather Performance in July 2019
- 🔥 The FDS System was **PROVEN** to **CONSISTENTLY** deliver impressive results against both water and air leakage



# Have we achieved our objectives?

- 🔥 The door blank has been tested and **PROVEN** to reduce noise by 33db, above the minimum standards required by Approved Document E of Build Regulations



SOUND IN.

# Have we achieved our objectives?

- 🔥 The door blank has achieved a centre pane U value rating of 1.0w/m2k
- 🔥 We have engaged the services of BBA to undertake heat flow testing of the frame to determine the products thermal conductance value
- 🔥 These results will be used to calculate U Values
- 🔥 This will be tested ahead of launch, and based on historical evidence, we are confident that we will satisfy Approved Document L of the Build Regulations



# Standard Hardware

- 🔥 All Neuma FDS door sets come with a high specification of door furniture and hardware as standard
- 🔥 Auto throw multipoint lock to meet the requirements of SBD
- 🔥 316 Marine Grade Stainless Steel Handles which are DDA compliant
- 🔥 3\* Security Thumb Turn Cylinder (Kite Marked) with 5 keys supplied
- 🔥 TS008 Kite Marked Security Letter Plate (if required)
- 🔥 TS002 141-degree Door Viewer (if required)
- 🔥 Overhead Door Closer

# Third Party Certification – Q Mark

- 🔥 Whilst not mandatory, FDS actively promotes and supports the need for 3<sup>rd</sup> Party Certification for risk to life product
- 🔥 We insist that all stages of the supply chain are Q-Mark Certified by BM Trada
- 🔥 The door blank manufacturer was successfully re-audited for Q Mark in May 2019
- 🔥 FDS was successfully audited for Q-Mark as distributors of the Neuma FDS System on 15<sup>th</sup> October 2019
- 🔥 All authorised partners will be audited for Q-Mark for fabrication and where appropriate installation
- 🔥 This gives, you the client, and ultimately your clients, the confidence and peace of mind that the product you specify is manufactured and installed to the highest possible standards under a robust controlled certification scheme

# PROVEN, CONSISTENT

- 🔥 In summary...
- 🔥 We have achieved our ini
- 🔥 We have **PROVEN** through  
**COMPLIANCE** for



FIRE



monstrates

ORMAL  
FORMANCE

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Thank you  
for listening