



# THE COMPANY A SAFE PARTNER

The objective of Teckentrup UK Limited is straightforward; to lead the market with products that are compliant to all current standards, offer a best practice choice to the construction industry and, in doing so, become a safe partner.

#### SCALE

Teckentrup UK Limited is part of the Teckentrup group of companies. Incorporated over 80 years ago, Teckentrup is a family business and one of the largest steel door producers in Europe, employing 950 people and operating from 1.1m sqft of manufacturing space on two sites in Germany.

#### INVESTMENTS

Teckentrup maintains a dynamic approach to product improvement and new developments through continual annual investment. In addition, every ten years, Teckentrup invests 40% of annual revenues in fixed asset expansion.

#### PERFORMANCE STANDARDS

Systematic testing of products to current and new performance standards is central to Teckentrup's commitment to compliance at all times with the statutory and mandatory requirements of UK Building Standards and Harmonized European Product Standards and Norms. Products are CE marked in accordance with current CPR legislation.

#### RESPONSIBILITY

Teckentrup takes very seriously its responsibility to ensure products are tested to the performance standards claimed and are suited to the performance and functional requirements specified. This is of prime importance when dealing with life safety products, such as fire rated doors and emergency exits. Teckentrup considers upholding standards as a powerful tool to demonstrate the capability and strength of its business.





#### BUSINESS PROCESSES

ISO 14025 & EN15804 Environmental Product Declaration DIN EN ISO 9001 Quality management DIN EN ISO 14001 Environmental management DIN EN ISO 50001 Energy management



# **DOOR SOLUTIONS**

Teckentrup's approach is solution driven. "Door Solutions" is all about answering the decisive question: **What is the right solution for you?** 

Teckentrup has decades of product design, development, manufacturing and installation expertise. We partner your project with sound advice and compliant products.

Aesthetics and functionality requirements are uniquely met with products that may have widely varying characteristics but harmonise with your design objectives.

Fire and smoke protection, security, thermal, acoustic, whatever the individual or combined requirement, Teckentrup will provide a door package to deliver your optimum solution.





# SMART & MODULAR

#### MULTI-PERFORMANCE CAPABILITY

Most companies talk about their security door range or their fire door range...

...At Teckentrup we talk about the Teckentrup 62, one door configurable to multiple performance characteristics.

**How do we do this?** Teckentrup takes a modular approach to manufacturing doors. Teckentrup's automated parametric production lines use a precision-made base platform door, into which the required performance characteristics are built.

Why do we do this? Modular manufacturing is a highly effective means of applying volume manufacturing techniques. High versatility and optimum efficiency is the result that allows Teckentrup to offer Teckentrup 62s' superior performance into a competitive market.

#### What does this mean for the Teckentrup 62?

Multiple attributes such as fire resistance, security, and sound attenuation are available in one door, certified and compliant to the required specification. Certification is not for separate products but the specified characteristics in one door.

**Just the door?** Vision panels, louvres and hardware variations such as EN179 and EN1125 panic escape are all part of the same certified product package.

What about installation? The installation environment is also considered with frame profiles and fixing options to suit all wall types and installation scenarios. Selecting multiple characteristics in a door is what the Teckentrup 62 and modular design is all about...

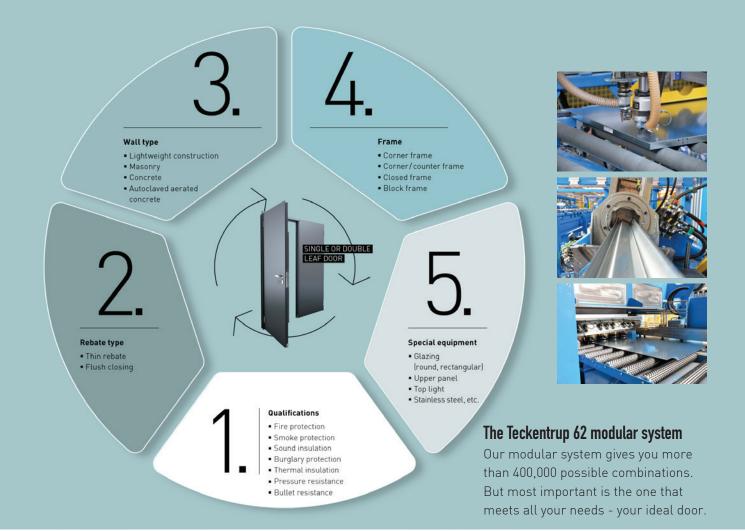
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Fire Integrity Fire Insulation			
N/A E30 E60 E90 <b>E120</b> E240	N/A El <sub>2</sub> 30 <b>El<u>5</u>60</b> El <sub>2</sub> 90		
Smoke Protection Acoustic Performance			
No Yes	N/A 33dB 41dB 57dB		
Security Level BS EN 1627-1 Security Level LPS 1175 ISSUE 8			
N/A RC2 RC3 RC4	N/A A1 B3 C5 <b>D10</b> (SR1) (SR2) (SR3) ( <b>SR4</b> )		
Pressure Thermal			
N/A <b>5kPa</b> 7kPa	N/A 1.1 W (m2K)		
Bullet Proof Escape			
N/A FB4	BS EN 179 BS EN 1125		

## **CERTIFIED** COMPLIANT





LPCB

LPS 1175 Issue 8 Security Rating A1 (SR1) to D10 (SR4) LPS 2081 Security Rating A + B

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BS EN 1627-1 Security rating RC2, RC3, RC4



BS EN 1522 Bullet proof rating FB4



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BS EN 1634-1 achieving 120 minutes fire integrity and 60 minutes fire insulation



BS EN 1634–3 Smoke protection  $S_a / S_{200}$ 



BS EN 10140 / EN 717 rating up to 44dB



BS EN 12211 pressure 7000Pa max



BS EN ISO 12567–1 achieving a UD value of 1.1  $W/m^2/K^\circ$ 



BS EN 179 & BS EN 1125 Panic functions

BS EN 12207 for air permeability achieving Class 2/4\* for a single and Class 1/3\* for a double leaf door \* Single point/Multi-point locking

BS EN 12208 for water tightness achieving Class 7A for a single and Class 6A for a double leaf door

A Teckentrup 62 insulated door set, fitted with heavy duty 'KO' hinges has been tested to BS EN 1191 for repeated opening and closing to C5 level - 200,000 cycles

All parameters subject to size restrictions and may require special equipment.





### **SECURE?**

#### What does security mean?

### Without certified test evidence of performance, any claims for a doors' security are unproven.

Teckentrup 62 doors have been tested to all the widely recognised standards including the new LPS 1175 issue 8.



Teckentrup 62 can be configured to withstand physical attack for varying periods of time with a variety of attack tools. The longer the attack time and the more aggressive the tools used, the higher the security rating.

#### Are all standards the same?

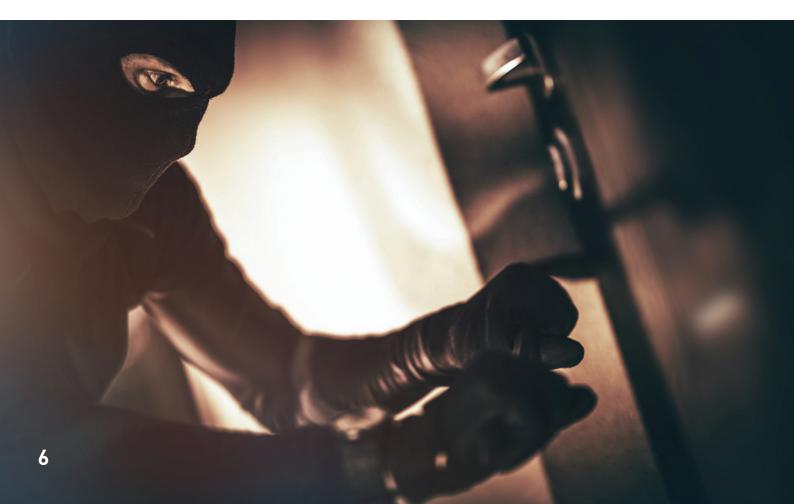
### No. Each standard has differences, however they address the same issues of tools and time, each in a slightly different way.

Standards also address the type of attack - LPS 1175 categorises attacks regardless of the noise made, whilst LPS 2081 categorises attacks made with minimal noise, "stealth" attacks. BS EN 1627-1 categorises for stealth on RC2 & RC3 and RC4 regardless of noise.

#### LPS 1175 Issue 8

Teckentrup 62 has been tested to Issue 8 of the standard. The bracketed rating, e.g. (SR1) provides the equivalent under Issue 7 where applicable.

The commonly required security levels, along with the typical applications are shown on the facing page. The standard has more extended times and tool kits, however as, apart from highly specialised applications, LPS 1175 D10 (SR4) is generally the highest requirement and we've limited the listing up to this level.



Teckentrup 62 is available to meet the following:

#### Teckentrup 62 Secure 1 LPS 1175 A1 (SR1)

#### Tool type A, 1 minute attack, max test duration 10 minutes

Opportunist attack using small, easily concealed tools, typically used for domestic and low commercial risks.

#### Teckentrup 62 Secure 2 LPS 1175 B3 (SR2)

#### Tool type B, 3 minute attack, max test duration 15 minutes

More determined opportunist attack using tools of greater mechanical advantage, typically used for domestic and low commercial risks such as office buildings, schools and small shops.

#### Teckentrup 62 Secure 3 LPS 1175 C5 (SR3)

#### Tool type C, 5 minute attack, max test duration 20 minutes

Deliberate forced entry using a wide selection of commonly available tools, typically used for higher commercial risks and infrastructure.

#### Teckentrup 62 Secure 3+ LPS 1175 D5

#### Tool type D, 5 minute attack, max test duration 20 minutes

Experienced attempts at forced entry, typically used for higher commercial risks and infrastructure.

#### Teckentrup 62 Secure 4 LPS 1175 D10 (SR4)

#### Tool type D, 10 minute attack, max test duration 30 minutes

Experienced attempts at forced entry, typically used for high commercial risks and critical infrastructure.

#### LPS 2081 "stealth"

The test categorises opportunist attack using stealth and small, easily concealed tools (Type A) or tools with greater mechanical advantage, fairly easy to conceal about the person (Type B). Typically used for domestic and low commercial risks.

Teckentrup 62 Secure A LPS 2081 A Tool type A, 1 minute attack, max test duration 10 minutes Teckentrup 62 Secure B LPS 2081 B

Tool type B, 3 minute attack, max test duration 15 minutes



#### **BS EN 1627-1** Teckentrup 62 is also tested to RC2, RC3 & RC4



#### **BS EN 1522 FB4**

Armed attackers are also thwarted with Teckentrup 62 tested to FB4 resistance.

#### Also available with...









Which suit do most people own?

### **LIFE CRITICAL**

#### Setting a new level.

### Teckentrup has left its mark in on the development of structural fire protection in Germany for decades.

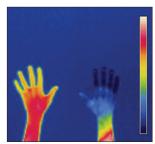
Teckentrup's best-practice approach is best exemplified by its insulated fire doors and the opportunity they provide for architects to specify a commercially competitive, integrity and insulation performance level.

The UK & Ireland are the only major European markets where it is NOT mandatory to specify steel personnel doors with both insulation and integrity fire ratings, Teckentrup advocates change.

Teckentrup 62 makes both a commercial and evidence based case for EI doors.

#### Thermal Radiation Effects from 0.5m Results from the unexposed side of a steel door in a BS EN 1634-1 fire test

In a fire situation an uninsulated, hollow metal door will contain a fire but offer little resistance to the passage of thermally radiated heat.



Levels of up to 33.5 kW/M2 after 30 minutes at 0.5M from the unexposed surface are typically recorded on test, risking harm to people queuing in high traffic, escape corridors.

These levels also risk becoming an ignition source for close proximity inflammable materials and oil filled door closers.

The Teckentrup 62 steel door is tested to BS EN 1634-1. It provides up to 120 minutes integrity and up to 60 minutes insulation, increasing the safety of any people in proximity to the door in a fire situation.



Thermal Radiation Effects: OGP Risk Assessment Data Directory – Vulnerability of Humans









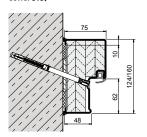
#### Also available with...





#### **BLOCK FRAME**

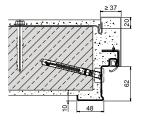
Type 4.1 Wall plug assembly with plaster filling (masonry/autoclaved aerated concrete)



NOTE: Infils shown in frame details and images are optional - Teckentrup will advise requirements dependent on application.

#### CORNER/COUNTER FRAME

Corner/counter frame for 62 mm doors Wall plug installation with slide anchor (masonry/concrete)



Wall plug and hinged anchor installation (exposed masonry/autoclaved aerated concrete walls)

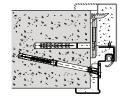
Type 4.1 Flush installation (specific

fixings for certain levels of security)

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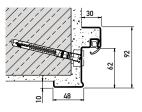
Secure 3 Secure 3+

Secure 4



#### CORNER FRAME

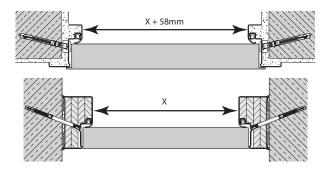
Corner frame wall plug assembly



#### Flush installation, extra space.

### Teckentrup 62 is available with frames to suit all applications and wall types.

"Wrap around" corner and corner/counter frames create a clean interface with the building.



Corner frames, corner counter frames and wraparound frames achieve a wider clear opening than conventional block frame designs - the door leaf is wider as a consequence for any given opening size. 58mm is the typical additional clear opening gained.

#### BLOCK FRAME



#### CORNER FRAME



#### CORNER COUNTER FRAME





#### STAINLESS STEEL

Stainless steel creates striking combinations of form and light. Its surface structure shapes the look of interiors with shiny and matt surfaces to create interesting visual effects.

The choice of surfaces are circularly ground (marbled) or 240 grit honed. (Linen surface texture on request).

The use of different stainless steel qualities depends on the environmental conditions at the place of use, e.g. contact with alkalis, acids etc., and must be specified when ordering.

Materials available:

- Standard V2A steel (material No. 1.4301)

- V4A steel (material number 1.4571) at higher requirements for chemical resistance or resistance to aggressive environmental influences.





Surface circular ground (marbled)

Surface honed (240 grain)





# SAFELY AND RESPONSIBLY BUILT

The responsible use of natural resources is important to us. We support you in your environmentally-compatible and sustainable construction projects.

This is why all of our products are certified in accordance with the Environmental Product Declaration (EPD). A seal of quality which supplies all information on the life cycle and ecological assessment for the current building certification systems.





DGNB Deutsche Gesellschaft für Nachhaltiges Bauen e. V. German Sustainable Building Council BNB Bewertungssystem Nachhaltiges Bauen

BREEAM

Building Research Establishment Environmental Assessment Methodology







LEED

Leadership in Energy and Environmental Design

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October 2019. As ours is a policy of progressive design, we reserve the right to alter specification without prior notice. Errors and omissions excepted.

