

UK DATA CENTRE SECURITY

Specifier's Checklist.

A practical reference for architects, M&E consultants and security designers specifying the building envelope and perimeter of UK data centre projects.

INSIDE

NPSA-aligned threat zoning · LPS 1175 rating selection · Hostile vehicle mitigation · Certification standards at every layer.

USE IT FOR

RIBA Stage 2 onwards. Pre-tender verification. NBS specification and Building Safety Act Golden Thread evidence.

FORMAT

A4 · 8 + cover

EDITION

Rev 01 · 05/2026

ISSUE

LPS 1175 Issue 8

REFERENCE

PSB-DC-SC-001

INTRODUCTION

Why this checklist exists.

On **12 September 2024**, UK data centres were formally designated Critical National Infrastructure — the first new designation since 2015. Combined with a wave of hyperscale and AI-driven investment, this has raised the bar for physical security on every new data centre project.

Physical security is now a board-level concern, and specifiers are expected to demonstrate layered, independently certified protection across forced entry, vehicle attack, ballistic, blast and fire threats. This checklist gives you a structured route through that specification process.

A WHO THIS IS FOR

- Architects and architectural technologists
- M&E and building services consultants
- Security consultants and risk assessors
- Main contractors and design-and-build teams
- Data centre facilities and estates teams

B HOW TO USE IT

- STEP 1**
PAGE 3 Identify the threats at your site and for each zone.
- STEP 2**
PAGE 4 Specify zone by zone using the recommended starting points.
- STEP 3**
PAGE 5 Select LPS 1175 ratings for forced-entry resistance.
- STEP 4**
PAGE 6 Specify HVM where vehicle attack is a credible threat.

IMPORTANT NOTE

The recommendations in this checklist are guideline starting points reflecting common UK practice. They are **not a substitute for a project-specific Operational Requirement and threat assessment**. Always confirm ratings against your assessment and, where appropriate, NPSA advice. Product ratings apply only to the exact tested configuration, including frame, fixings and glazing.

THEN BEFORE TENDER

Use the **Standards Quick Reference** (page 7) and the **Pre-Tender Verification Checklist** (page 8) to sign off the specification with confidence before going to market.

NPSA PHILOSOPHY

Concentric protection, increasing inward.

UK data centre physical security planning follows two complementary NPSA models. Premier's products sit firmly in the **Barriers** and **Delay** layers — the elements that physically resist an attack long enough for response to intervene.

DETER · DETECT · DELAY

Deter

Make the site an unattractive target through visible, credible security.

Detect

Identify an attack early through surveillance and intrusion detection.

Delay

Physically resist the attack long enough for response to intervene.

BARRIERS · ACCESS CONTROL · DETECT

Barriers

Certified physical resistance at perimeter, envelope and internal lines.

Access control

Controlled, auditable, single-person entry at sensitive boundaries.

Detect

Layered surveillance and monitoring throughout.

L THE FOUR PHYSICAL LAYERS OF A DATA CENTRE

Rating increases inward toward the most critical assets

OUTER

**LAYER 01
SITE
PERIMETER**

The outer line. **Hostile vehicle mitigation**, perimeter intrusion detection, rated gates and fencing.

**LAYER 02
BUILDING
ENVELOPE**

The skin of the building. **Rated doors, windows, glazing, curtain walling and louvres.**

**LAYER 03
INTERNAL
ZONES**

Data halls, plant rooms, generator and battery rooms. **Compartmentation and forced-entry resistance.**

**LAYER 04
CRITICAL
COMPARTMENTS**

MMR, control rooms, classified compute. **Highest ratings**, often combining multiple threats in a single certified assembly.

CRITICAL

SPECIFIER'S TAKEAWAY

Treat the four layers as a checklist of their own. For every project, confirm *which* threats apply at *each* layer before fixing product ratings — threats and ratings are independent.

STEP 01 OF 04

Tick every credible threat.

Tick every threat your assessment identifies as credible at the site or at a specific zone. Each threat is a **separate, independently certified resistance** — a product rated against one threat is not automatically rated against another.

Forced entry (intruder attack)

- Opportunistic intrusion and theft of hardware
- Organised, tooled attack on high-value compute
- Insider-assisted breach
- Sabotage of M&E plant

GOVERNING STANDARD · LPS 1175 ISSUE 8

Vehicle attack

- Vehicle as a battering ram (ram-raid)
- Vehicle-borne improvised explosive device (VBIED)
- Hostile reconnaissance by vehicle
- Layby / approach road enabling a high-speed run

GOVERNING STANDARDS · PAS 68, IWA 14-1

Ballistic attack

- Firearms threat to personnel (reception, control room, NOC)
- Targeted attack on critical internal rooms
- Site in an elevated-threat location or sector

GOVERNING STANDARDS · EN 1522/1523 · EN 1063

Blast

- Vehicle bomb at the perimeter or facade
- Hand-carried (satchel) device in a public-access area
- Industrial explosion (lithium-ion BESS, UPS thermal runaway)

GOVERNING STANDARDS · ISO 16933 · EN 13123/13124 · EN 13541

Fire

- Compartmentation between data halls and plant
- High fire load in battery, UPS and generator rooms
- Dual fire-and-security requirement on the same opening

GOVERNING STANDARDS · EN 1634-1 · EN 16034 · BS 476 PT 22 · LPS 1056

CAUTION · COMBINED-RATING ZONES

A product rated against one threat is **not automatically rated against another**. Where a zone faces more than one credible threat, specify a combined-rating product that holds each rating *independently*.

STEP 02 OF 04

Tick the products to specify, zone by zone.

For each zone present on your project, tick the products to specify and note the threats to carry. Ratings are confirmed at **Step 3** (LPS 1175) and **Step 4** (HVM).

01 SITE PERIMETER

- HVM bollards (PAS 68 / IWA 14-1)
- Crash-rated sliding or cantilever gates
- PIPS HVM (intrusion + vehicle mitigation)
- LPS 1175 rated pedestrian gates

02 VEHICLE ENTRY & LOADING BAY

- Crash-rated sliding gates
- HVM bollards or road blockers at entry point
- LPS 1175 personnel doors
- Blast-rated industrial doors (if blast assessed)

03 RECEPTION & VISITOR SCREENING

- LPS 1175 glazed doors and screens
- Ballistic transaction screens (if ballistic assessed)
- Anti-tailgating security portals or mantraps

04 CONTROL ROOM & NOC

- Ballistic doors and glazing (FB rating, NS spall)
- Fire-rated doors
- LPS 1175 forced-entry rating

05 DATA HALLS

- LPS 1175 swing or sliding doors
- Fire-rated or dual-certified doors for compartmentation
- Retractable security grilles for internal zoning

06 MMR — MEET-ME ROOM

- High LPS 1175 rating (insider-assisted breach credible)
- Fire-rated doors
- Ballistic rating where assessed

07 PLANT & MECHANICAL SPACES

- LPS 1175 doors
- Fire-rated louvre doors (E60 / E90)
- Blast-rated ventilation louvres (if blast assessed)

08 UPS & BATTERY ROOMS

- Blast-rated doors and louvres (Li-ion containment)
- High fire rating (up to EI 240)
- LPS 1175 forced-entry rating

09 GENERATOR HALLS

- Acoustic-rated fire doors
- Blast-rated louvre doors
- LPS 1175 industrial doors

10 TEMPEST & CLASSIFIED COMPUTE

- EMI/RFI shielded ballistic doors
- RF-shielded security hatches
- Integrated shielded wall assemblies

STEP 03 OF 04

How the Issue 8 system reads.

LPS 1175 Issue 8 ratings combine a **letter (A-H)** for the tool category the product resists, and a **number (1, 3, 5, 10, 15, 20)** for the delay time in minutes. Most current products carry dual labels (e.g. *C5 (SR3)*) to bridge the older Issue 7 vocabulary.

LETTER (A-H)

Tool category resisted, from low-grade tools (A) up to power-tool and torch-equipped attacks (H).

D10

EXAMPLE: D10 = SR4

NUMBER (MINUTES)

Working-attack delay time the product resists — typically 1, 3, 5, 10, 15 or 20 minutes.

5A RECOMMENDED LPS 1175 RATING BY ZONE

| ZONE | TYPICAL RATING | NOTES |
|-------------------------------|-------------------------|--|
| Outer perimeter line | B3 (SR2) min → C5 (SR3) | Slows opportunistic & determined intruders. |
| Vehicle gate / loading bay | C5 (SR3) → D10 (SR4) | Reflects hardware value and available cover. |
| Building envelope / reception | C5 (SR3) | Usually paired with anti-tailgating portals. |
| Plant rooms | C5 (SR3) | Often combined with fire and louvre needs. |
| UPS / battery rooms | C5 (SR3) → D10 (SR4) | Higher where blast and fire also required. |
| Generator halls | C5 (SR3) | Combined with acoustic and fire performance. |
| Data halls | D10 (SR4) | UK standard for data hall envelopes. |
| MMR — meet-me room | D10 (SR4) → E10 (SR5) | Insider-assisted breach is credible. |
| Control rooms / NOC | D10 (SR4) → E10 (SR5) | Often combined with ballistic glazing. |
| Government / defence-adjacent | E10 (SR5) or higher | Aligns with enhanced threat profiles. |

5B ISSUE 7 → ISSUE 8 EQUIVALENTS

| ISSUE 7 | ISSUE 8 | ISSUE 7 | ISSUE 8 |
|---------|---------|---------|---------|
| SR1 | → A1 | SR5 | → E10 |
| SR2 | → B3 | SR6 | → F10 |
| SR3 | → C5 | SR7 | → G10 |
| SR4 | → D10 | SR8 | → H20 |

NOTE · PRACTICAL RANGE

There are currently **no products certified to SR7 (G10) or SR8 (H20)**. For data centre work, ratings from **B3 (SR2) to E10 (SR5)** cover the vast majority of applications. Always confirm the underlying tested rating with the manufacturer rather than assuming a one-to-one carry-over.

STEP 04 OF 04

Vehicle as a weapon — five decisions to make.

6A CHOOSE THE STANDARD

- PAS 68** — the original UK specification, most commonly cited on UK projects.
- IWA 14-1** — the ISO-aligned equivalent, preferred for multinational portfolios.

PREMIER HVM PRODUCTS ARE TESTED TO BOTH – CHOICE CAN FOLLOW OPERATOR AND PORTFOLIO PREFERENCE.

6B WORK THROUGH THE HVM DESIGN SEQUENCE

OPERATIONAL REQUIREMENT Define what the scheme must achieve and the access needs of staff, deliveries and emergency vehicles.
OR

VEHICLE DYNAMICS ASSESSMENT Model approach routes, maximum achievable impact speed and the credible vehicle type and mass.
VDA

STANDOFF DISTANCE Establish the minimum distance the facade must be kept from an impacting or detonating vehicle.
SETBACK

PRODUCT SELECTION Choose rated products whose tested penetration keeps the vehicle outside the standoff line at the assessed speed.
RATED

OPERATIONAL INTEGRATION Combine static and active barriers so legitimate traffic flows through controlled, rated points.
ACTIVE + STATIC

6C HOW TO READ A PAS 68 RATING

EXAMPLE RATING

V / 7500 [N3] / 48 / 90 : 5.0

| | | | | | |
|---------------------|-----------------------|--------------------|------------------------------|------------------------|-----------------------------|
| V | 7500 | [N3] | 48 | 90 | 5.0 |
| Vehicle impact test | Test vehicle mass, kg | Rigid HGV category | Impact speed (km/h) ≈ 30 mph | Impact angle (head-on) | Penetration past barrier, m |

Lower penetration is better. Select the vehicle type, mass and speed that reflect the credible threat at each entry point.

CONSTRAINED SITES
Where standoff distance cannot be achieved (common on London-edge and M4 corridor sites), **harden the facade itself**. Premier's HVM crash-tested glass curtain wall provides a rated glazed facade and can combine ballistic, blast and LPS 1175 ratings in one assembly.

REFERENCE

One standard per threat, one rating per element.

Each standard below addresses a specific threat and is an **independent certification**. A complete data centre specification normally cites several together — paired correctly for each opening.

| STANDARD | THREAT | SCOPE | RATING FORMAT |
|----------------------|---------------------------|---|---|
| LPS 1175 Issue 8 | Forced entry | Doors, windows, glazing, louvres, curtain walling, gates, grilles | B3 → E10 (SR2 → SR5) |
| EN 1627-1630 | Forced entry (European) | Doors, windows, shutters, grilles | RC1 → RC6 |
| EN 1522 / 1523 | Ballistic (assembly) | Complete door, window, shutter, louvre, curtain walling | FB1 → FB7 (+FSG), S or NS |
| EN 1063 | Ballistic (glazing) | Security glazing alone | BR1 → BR7 (+SG1, SG2), S or NS |
| ISO 16933 | Blast (arena) | Glazing; frames where classified | EXV / SB with hazard letter A → F |
| EN 13123 / 13124 | Blast (assembly) | Complete door, window, shutter, curtain walling | EPR1 → EPR4, EXR1 → EXR5 |
| EN 13541 | Blast (glazing) | Security glazing alone | ER1 → ER4 |
| PAS 68 / IWA 14-1 | Hostile vehicle | Bollards, gates, barriers, curtain walling | Vehicle type / mass / speed / penetration |
| EN 1634-1 / EN 16034 | Fire | Fire and smoke door and shutter assemblies | E and EI ratings in minutes |
| BS 476 Part 22 | Fire (legacy UK) | Non-loadbearing elements | Integrity and insulation in minutes |
| LPS 1056 | Fire (certified doorsets) | Fire and fire-and-security doorsets | Fire rating in minutes + security grade |

! TWO RECURRING DISTINCTIONS TO REMEMBER

01 · GLAZING VS. ASSEMBLY RATING

Across ballistic and blast, there is a rating for the **glazing alone** (EN 1063, EN 13541) *and* a rating for the **complete installed assembly** (EN 1522/1523, EN 13123/13124). A complete specification normally needs both.

02 · THE SUFFIX & THE LETTER MATTER

Ballistic ratings carry an **S or NS** spall classification. ISO 16933 blast ratings carry a **hazard letter A-F**. Neither rating is complete without it.

SIGN-OFF

Before issuing the specification — verify.

Tick each item once verified. Pre-completed ticks below indicate items every compliant data centre specification should resolve before going to market.

01 THREAT & ZONING

- Operational Requirement documented
- Threat assessment completed for site and each zone
- Each zone mapped to its credible threats
- Combined-threat zones identified for combined-rating products

02 RATINGS

- LPS 1175 ratings confirmed against assessment for every zone
- Ballistic FB and BR ratings paired, with S or NS specified
- Blast ratings specified with hazard letter (ISO 16933) or full class (EN 13123)
- Fire ratings (E / EI, minutes) confirmed for compartmentation and high fire load rooms
- HVM ratings derived from VDA and standoff

03 CERTIFICATION

- Products independently third-party certified, not self-certified
- LPS 1175 products LPCB Red Book listed
- Current certificates obtained for every specified product line
- Frame-to-wall interface detailing addressed (not covered by EN 1522/1523)
- Ratings confirmed for the exact tested configuration

04 DOCUMENTATION

- Certificates filed for the Building Safety Act Golden Thread
- Secured by Design requirements addressed where relevant
- NBS specification references correct standards and editions

How Premier can help.

Premier Security Ballistic & Blast Ltd is one of the few UK manufacturers independently certified across **forced entry, ballistic, blast and fire**. Our specification team can review your Operational Requirement, threat assessment and NBS specification and recommend certified products — including combined-rating assemblies — for every zone of your data centre. We work with architects, M&E consultants, security consultants and main contractors from **RIBA Stage 2 onwards**.

REQUEST A SPECIFICATION REVIEW

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LPCB RED BOOK LISTED · SECURED BY DESIGN MEMBER · ISO 9001 CERTIFIED · CONSTRUCTIONLINE GOLD APPROVED

UK MANUFACTURER · LPCB RED BOOK LISTED

Premier Security Ballistic & Blast Ltd.

Over 30 years protecting UK Critical National Infrastructure with independently certified ballistic, blast, fire and forced-entry resistant doors, windows, glazing, curtain walling and hostile vehicle mitigation.

FORCED ENTRY

LPS 1175
SR1 – SR6

BALLISTIC

EN 1522/1523
FB1 – FB7

BLAST

ISO 16933
EN 13123 / 13124

FIRE

EN 1634-1
EI60 – EI240

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