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**Agrément Certificate**
07/4446 (ES4)**ENHANCED SECURITY TO PAS 24 FOR PRODUCT SHEET 4****NORDAN ZD AND OD SINGLE-HANDLED TILT AND TURN INWARD OPENING WINDOWS**

This Enhanced Security sheet is not valid in isolation and must be read in conjunction with Product Sheet 4 of this Certificate. The information in this sheet supplements the details given in Product Sheet 4, section 9 *Unauthorised access*.

- *The details in this sheet are only relevant to windows manufactured by NorDan UK Ltd and meeting the specification defined in section 2 Scope of approval*
- *It is essential that the windows are installed in accordance with the recommendations contained in Product Sheet 4 and in the manufacturer's instructions to achieve the standard of enhanced security defined in this sheet.*

**1 General**

Selected windows from the NorDan ZD and OD Single-handed Tilt and Turn Inward Opening Windows covered by Product Sheet 4 were tested in accordance with BS EN 1627 : 2011 and met the requirements with a classification RC2N. In the opinion of the BBA the ZD and OD windows covered by Product Sheet 4 satisfy the requirements of PAS 24 : 2016 and are classified W.

2 Scope of approval

2.1 The specification for the windows considered to offer enhanced security comprises windows manufactured from components as listed in Table 1 and Figure 1, and in accordance with the recommendations contained in the Certificate holder's reference manual.

2.2 The scope of the test programme does not cover glass breakage as a means of entry. In locations where this is considered to be a significant risk, the use of laminated glass or other suitable glazing material may be necessary or required by Secured by Design (SbD) schemes.

3 Design features

Externally fitted aluminium glazing beads can be removed by manipulation but the subsequent removal of the glass without breakage and noise is extremely difficult due to the glazing being additionally secured by polyurethane adhesive sealant.

4 Design considerations

4.1 Only the specification of windows referred to in Table 1 and Figure 1 can be considered to meet the requirements. Any design variations to the frame profiles, tilt/turn gear, locking mechanisms, handles, keeps, striker plates, hinges, hinge protectors or associated fasteners will require the window to be retested.

4.2 To ensure the level of resistance to intrusion indicated by the tests is achieved, installation must be carried out in accordance with the recommendations contained in Product Sheet 4 and the manufacturer's instructions. For example, correct glass packing and fixing of the window into the opening are critical.

4.3 Windows assessed for enhanced security are designed to resist attempts to forced entry by the opportunist intruder using basic hand tools. However, the scope of assessment does not extend to an assurance of absolute security. In addition, window security must be considered in the context of the overall security of the building, taking into account such factors as vulnerability of individual windows and the security of doors.

The BBA has awarded this Certificate for Enhanced Security to PAS 24 to the company named above for the window systems described herein provided they are installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of First issue: 30 April 2020

Hardy Giesler
Chief Executive Officer

The BBA is a UKAS accredited certification body – Number 113.

*The schedule of the current scope of accreditation for product certification is available in pdf format via the UKAS link on the BBA website at www.bbacerts.co.uk
Readers MUST check the validity and latest issue number of this Agrément Certificate by either referring to the BBA website or contacting the BBA directly.
Any photographs are for illustrative purposes only, do not constitute advice and should not be relied upon.*



Table 1 ZD and OD Single-handled Tilt and Turn Inward Opening Windows — list of components

Application	Manufacturer's designation ⁽¹⁾
Frame part striker	261933
Frame part tilt striker	632132
Frame part Lifting mishandling device	261947
Sash part Lifting mishandling device	260538
Frame pivot rest	563736 563737
Frame part turn restrictor	491798
Frame stay arm	600803
Sash part corner drive	260277 260282 260286
Sash part corner hinge	634705
Sash part Centre lock 400	255280
Sash part Centre lock 600	255281
Sash part Centre lock extender	308267
Sash part espagnolette	430 mm 259717 580 mm 259719 980 mm 259720 1380 mm 259721 1780 mm 259762 2180 mm 259763
Stay guide 250-490 mm	385393
Load transfer device (sash)	567972
Load transfer device (frame)	565254
Tilt / turn handle – silver	0400566
– white	0400567

(1) These items may be unmarked and it is recommended that, if in doubt, the purchaser seeks written assurance of the component specifications from the Certificate holder.

Figure 1 Typical vertical section of a ZD and OD Single-Handled Tilt and Turn Window

