

**NorDan UK Ltd**

3 Almondview Office Park
Livingstone
EH54 6SF
Tel: 01506 433173
e-mail: info@nordan.co.uk
website: www.nordan.co.uk



Agrément Certificate
07/4446 (ES1)

ENHANCED SECURITY TO PAS 24 FOR PRODUCT SHEET 1**NORDAN ND 3-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 1 of this Certificate. The information in this sheet supplements the details given in Product Sheet 1, section 9 *Unauthorised access*.

- The details in this sheet are only relevant to windows fabricated 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 1 and in the manufacturer's instructions to achieve the standard of enhanced security defined in this sheet.

**1 General**

Selected windows from the NorDan ND 3-Handled Tilt and Turn Inward Opening Windows covered by Product Sheet 1 were tested in accordance with PAS 24 : 2012, Annex C *Specification for enhanced security performance of windows*, and met the requirements with a classification W KT.

2 Scope of approval

2.1 The specification for the windows considered to offer enhanced security comprises windows all 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 beds 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 1 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 Agrément Certificate for Enhanced Security to PAS 24 : 2012 to the company named above for the window system detailed herein, provided it is installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of Third issue: 4 April 2018

John Albon — Head of Approvals

Claire Curtis-Thomas

Originally certificated on 18 June 2007

Constructions Products

Chief Executive

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 are advised to check the validity and latest issue number of this Agrément Certificate by either referring to the BBA website or contacting the BBA direct.



Table 1 ND 3-Handled Tilt and Turn Inward Opening Windows — list of components

Application	Manufacturer's designation ⁽¹⁾
7-point locking tilt/turn gear NorDan (3 shootbolts and 4 deadbolts)	0400128 — 0400130
Tilt/turn pivot keeps	0400116, 0400117 0400120, 0400122 0400123, 0400127 0400158, 0400176
3 deadlock keeps	0400131
3 shootbolt striker keeps	0400295, 0400302 0400328, 0400332 0400333, 0400335 0400345, 0400362
Tilt/turn handle key locking	0400269, 0400270
non key locking	0400277, 0400278 0400266, 0400267 0400274, 0400275

(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 an ND 3-Handled Tilt and Turn Window

