

## NEW UPGRADED

SLIM PROFILE ULTRA LOW U-VALUE

# STORVIK DOUBLE AND TRIPLE GLAZED RANGE

THE SUSTAINABLE WINDOW OPTION



### A NEW UPGRADED RANGE OF TIMBER WINDOWS MEETING THE MOST EXACTING SPECIFICATIONS



- Improved thermal performance.

- Window energy ratings A to C.

- Efficient 24mm double glazed unit with Ultra Low STORVIK<sup>SKD</sup> U-Values to 1.2 Wm<sup>2</sup>K.



- Efficient 44mm triple glazed unit with Ultra Low STORVIK<sup>SKT</sup> U-Values to 0.8 Wm<sup>2</sup>K.



- Quality laminated Redwood Nordic Pine construction.

- Manufactured from the finest FSC® accredited timber on request.

- Slim profile, flush fit styling enables window furniture to be concealed.

- BRE Green Guide A+ Rated.

- High security Secured by Design locking system fitted as standard.

- European Conformity.



- Supplied fully finished in our extended range of paints and stains.

- Extensive guarantees for long-lasting peace of mind.

- Incorporating Swisspacer ULTIMATE, the leading warm edge spacer fitted where appropriate.

**SWISSPACER**  
SAINT-GOBAIN



## MEETING AND BEATING THE CHALLENGES OF HIGHER STANDARDS

Developed, designed and manufactured in the UK by Howarth specifically for the UK market, the upgraded STORVIK range was developed after extensive research into the latest in timber, glazing and weather seal products. The result is a window design that outperforms current standards to meet those expected of windows in the future.



## UPGRADED STORVIK<sup>SKD</sup> DOUBLE GLAZED WINDOWS

The STORVIK<sup>SKD</sup> Double Glazed window range is one of our latest developments. It is designed to provide the ultimate in energy performance while maintaining the aesthetics of our Flush Fit range and incorporating a 24mm sealed unit. These frames are manufactured using the very latest glazing advances to achieve a WER A rating, dependent upon requirements and, with the right combination of materials, U-Values can be reduced to around 1.2 W/m<sup>2</sup>K. The frames meet all Building Regulations and Secured by Design standards.



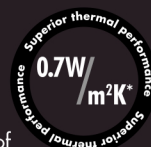
## UPGRADED STORVIK<sup>SKT</sup> TRIPLE GLAZED WINDOWS

The STORVIK<sup>SKT</sup> range of timber windows has been developed in response to increasing market demand for improved energy performance. Using the combination of high-spec materials the upgraded STORVIK<sup>SKT</sup> range provides U-Values down to 0.8 W/m<sup>2</sup>K. The frames meet all Building Regulations and Secured by Design standards.



## ULTRA LOW U-VALUES

Glazing is the prime driver in reducing U-Values, and the STORVIK design offers a wide range of glazing options. Argon filled units with warm edge spacer bars and the latest in low E coatings can drive down actual U-Values as low as 0.7w/m<sup>2</sup>K dependent upon the design of window required.



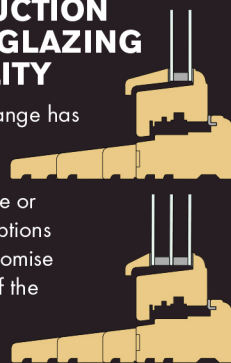
## SECURED BY DESIGN FITTED AS STANDARD

All windows in the STORVIK range are manufactured complete with Secured by Design hardware as standard, providing peace of mind for the consumer. Security for homeowners was a prime consideration in the design of the STORVIK range. The only exceptions are fire escape windows where ease of escape mechanism is necessary.



## LOGICAL CONSTRUCTION OFFERS GLAZING FLEXIBILITY

The STORVIK range has been designed so that choosing double or triple glazing options does not compromise the aesthetics of the window frame appearance.



## EFFICIENT HIGH PERFORMANCE GLAZING UNITS

The STORVIK range offers a full choice of glazing options to meet customer specifications regarding security, safety and thermal efficiency.







# NEW UPGRADED STORVIK<sup>SKD</sup> DOUBLE GLAZED RANGE

**A RANGE OF DOUBLE  
GLAZED TIMBER  
WINDOWS MEETING  
THE MOST EXACTING  
SPECIFICATIONS**

- Improved thermal performance.
- Window energy ratings A to C.
- Efficient 24mm double glazed unit with Ultra Low STORVIK<sup>SKD</sup> U-Values to 1.2 W/m<sup>2</sup>K.
- Quality laminated Redwood Nordic Pine construction.
- Manufactured from the finest FSC® accredited timber on request.
- Slim profile, flush fit styling enables window furniture to be concealed.



- BRE Green Guide A+ Rated.
- High security Secured by Design locking system fitted as standard.
- European Conformity.
- Supplied fully finished in our extended range of paints and stains.
- Extensive guarantees for long-lasting peace of mind.
- Incorporating Swisspacer ULTIMATE, the leading warm edge spacer fitted where appropriate.



**SWISSPACER**  
SAINT GOBAIN



# THE ULTRA LOW U-VALUE **STORVIK<sup>SKD</sup>** DOUBLE GLAZED RANGE

Designed to meet the growing need for a traditionally styled flush fit casement window, particularly in conservation and inner city re-development areas, the Howarth **STORVIK<sup>SKD</sup>** range provides the solution and then goes even further.

The upgraded Howarth **STORVIK<sup>SKD</sup>** range can reach as low as 1.2 W/m<sup>2</sup>K for thermal performance. This reduces energy demand for heating, thus lessening the environmental impact.

In addition the Howarth **STORVIK<sup>SKD</sup>** range earns an A+ rating from the BRE Green Guide for environmental performance.

In order to improve the overall aesthetic quality, and to offer enhanced strength and stability, all main frame and sash components are made from clear-faced laminated timber. This timber is sourced

sustainably so that it also provides an environmentally friendly solution. Plant-on components, such as sills, bay coupling posts and head drips are manufactured using non-laminated European Redwood.

This enables us to offer extensive guarantees on the frame, paint system, glazing units and ironmongery, giving everyone - from the specifier to the end-user - total peace of mind. The **STORVIK<sup>SKD</sup>** range is available fully finished in any of our extended range of standard finishes,



## FINISHING OPTIONS

Choose from a range of paint and stain finishes with built-in high performance, endurance and quality.

**NOTE:** Frames are generally available in standard RAL colours except black. For availability of other darker shades please contact the Sales Office on 01469 530577.

### Standard Stain Finishes



OAK



TEAK



HONDURAS



WALNUT

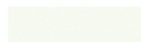


ROSEWOOD

### Standard Paint Finishes



COPPER BROWN



PURE WHITE



GARDENIA



COUNTRY CREAM



BUTTERMILK



PALE GREEN



PEBBLE GREY



DUSTY GREY



SLATE GREY



PASTEL BLUE

**NOTE:** All Howarth paint/stain finishes are silk and not high gloss.

## GUARANTEES

As a result of the improved stability of laminated timber construction we are able to provide guarantees for ten years on our paint finish and six years on our stain finish.

**NOTE:** All guarantees given in this catalogue are subject to limitations and are strictly dependent upon compliance with manufacturers' usage and maintenance instructions. These are available upon request.



Stain Finish



Paint Finish



Rot and Fungal Attack



Sealed Units



Ironmongery





## SECURED BY DESIGN

The range is supplied to Secured by Design standard, dependent on size and configuration. Contact our Sales Office for further details on 01469 530577.

As with all Howarth timber windows and doors, the STORVIK<sup>SKD</sup> range is manufactured under the strict guidelines set out by the British Woodworking Federation's Timber Window Accreditation Scheme,

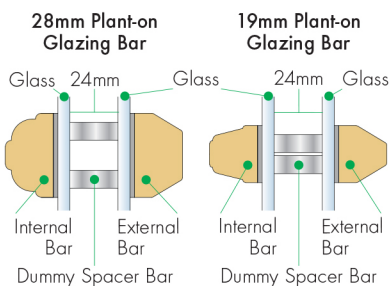
which is now inspected under the BSI Kitemark Scheme, ensuring the best quality products and the highest levels of performance.



**TWA**  
SCHEME  
manufacturer



## LEAD AND BAR OPTIONS



Dummy spacer bar with 19mm plant-on timber bars.

### Leading Options

Leading is available in either 9mm or 12mm thicknesses applied to both sides of the external pane.

Square and Diamond patterns (illustrated below) are available as standard.

For further details of alternative configurations please contact the Sales Office on 01469 530577.

### Plant-on Bar

All our windows are priced as standard with the plant-on bar method to both internal and external faces of the glass.



19mm Plant-on Bar

### 19mm and 28mm Plant-on Bar Options

Plant-on bars are available in widths of either 19mm or 28mm at the same price.

### Dummy Spacer Bar

Dummy spacer bars are available as an extra cost option on all plant-on bar ranges, giving the appearance of individual panes (shown above).

### Glazing Options

Meeting and exceeding current requirements.

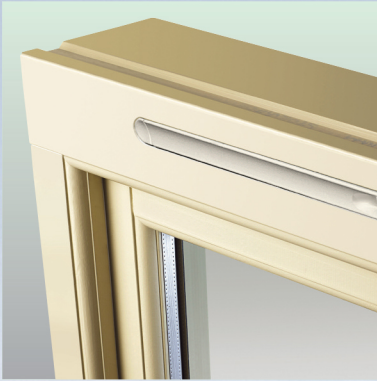


9mm Diamond Lead



9mm Square Lead

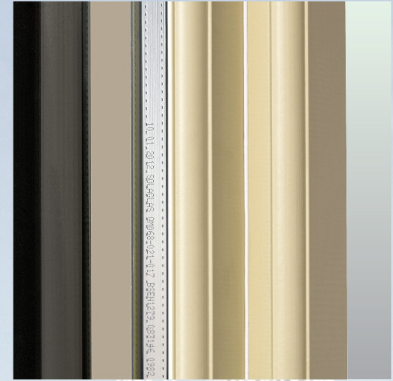




(Above) The STORVIK<sup>SKD</sup> Double Glazed window range features a built in vent, shown in an closed position and the design utilises a thicker head section providing increased plaster line clearance.

(Right) The STORVIK<sup>SKD</sup> Double Glazed range features a stylish profile to enhance the internal appearance.

**Timber.** All timber used is laminated Redwood Nordic Pine from well managed yield sources.

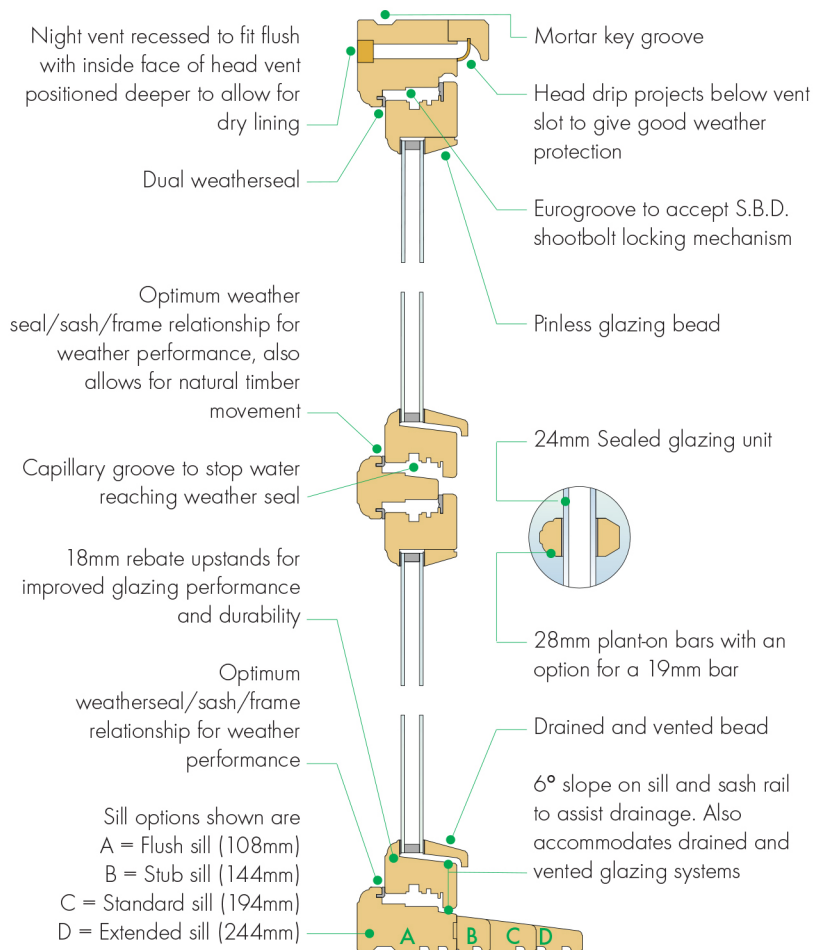


(Above) The upgraded STORVIK<sup>SKD</sup> Double Glazed window range features S.B.D. shootbolt locking for optimal security. Face-fixed handles are available in White or Black as standard or in a choice of other colours as an optional extra.

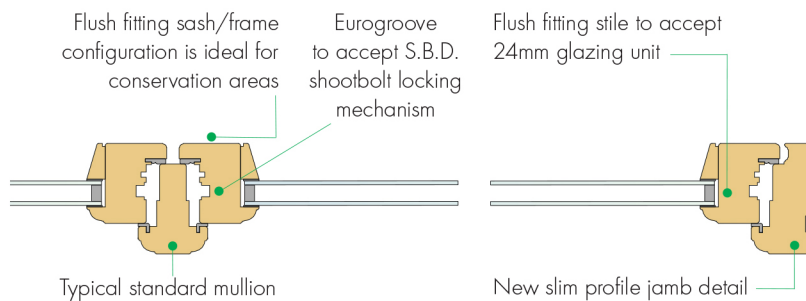
(Below) The STORVIK<sup>SKD</sup> Double Glazed window range features reflex hinges for ease of use.







## CROSS SECTION THROUGH HORIZONTAL



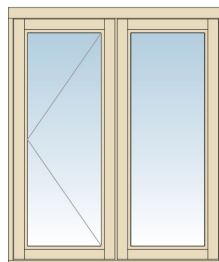
## CE MARKING



## THERMAL PERFORMANCE

	Benchmark U-Value	W.E.R. Rating
Energy Ultra	1.3	A
Energy Plus	1.3	B
Energy	1.5	C
Energy Ultra U	1.2	C

Benchmark Window  
 1230mm wide  
 x  
 1480mm high



## PRODUCT RANGE

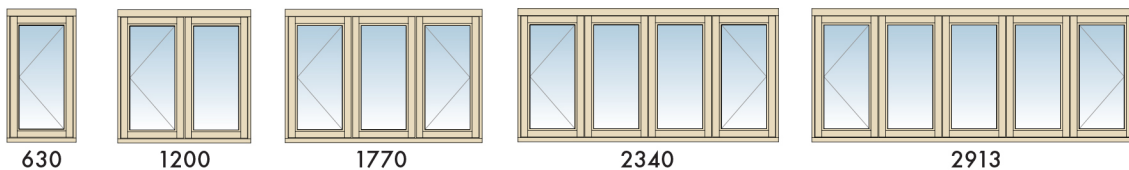
- 01 STORVIK<sup>SKD</sup> DOUBLE GLAZED SIDE HUNG (STANDARD MODULE)
- 02 STORVIK<sup>SKD</sup> DOUBLE GLAZED SIDE HUNG (NARROW MODULE)
- 03 STORVIK<sup>SKD</sup> DOUBLE GLAZED TOP HUNG (STANDARD MODULE)
- 04 STORVIK<sup>SKD</sup> DOUBLE GLAZED TOP HUNG (NARROW MODULE)
- 05 STORVIK<sup>SKD</sup> DOUBLE GLAZED STANDARD VENT (STANDARD MODULE)
- 06 STORVIK<sup>SKD</sup> DOUBLE GLAZED STANDARD VENT (STANDARD MODULE) CONT'
- 07 STORVIK<sup>SKD</sup> DOUBLE GLAZED STANDARD VENT (NARROW MODULE)
- 08 STORVIK<sup>SKD</sup> DOUBLE GLAZED STANDARD VENT (NARROW MODULE) CONT'
- 09 STORVIK<sup>SKD</sup> DOUBLE GLAZED DEEP VENT (STANDARD MODULE)
- 10 STORVIK<sup>SKD</sup> DOUBLE GLAZED DEEP VENT (NARROW MODULE)
- 11 STORVIK<sup>SKD</sup> DOUBLE GLAZED NARROW MODULE ESCAPE WINDOW
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- 14 STORVIK<sup>SKD</sup> 60° SPLAYED BAYS
- 15 STORVIK<sup>SKD</sup> 45° SQUARE BAYS
- 16 STORVIK<sup>SKD</sup> 30° SQUARE BAYS
- 17 STORVIK<sup>SKD</sup> WINDOW OPTIONS



**NOTE:** Results generated by Howarth to determine energy ratings are conducted using the rules and procedures used by the BFRC and are based upon the BFRC standard specification and frame sizes for such calculations.

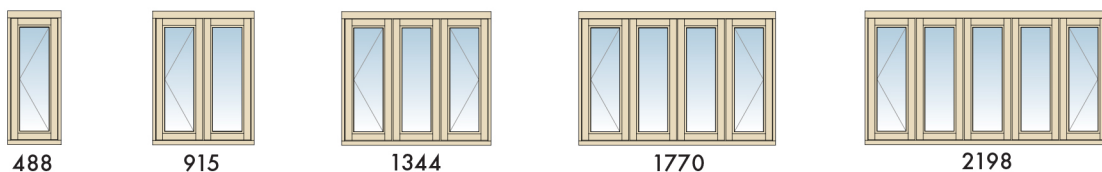


## 01 STORVIK<sup>SKD</sup> DOUBLE GLAZED SIDE HUNG (STANDARD MODULE)



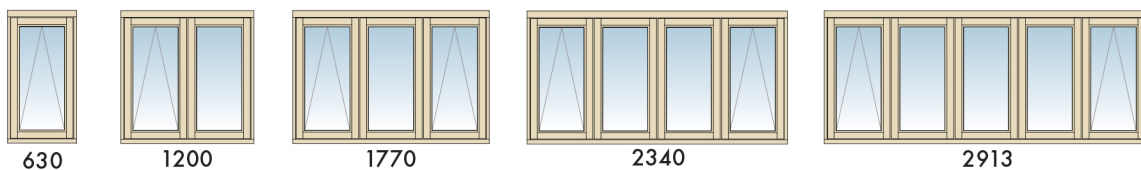
HEIGHT	CODE	CODE	CODE	CODE	CODE
750	SKD107C	SKD207CF	SKD307CFC	SKD407CFFC	SKD507CFFFC
900	SKD109C	SKD209CF	SKD309CFC	SKD409CFFC	SKD509CFFFC
1050	SKD110C	SKD210CF	SKD310CFC	SKD410CFFC	SKD510CFFFC
1200	SKD112C	SKD212CF	SKD312CFC	SKD412CFFC	SKD512CFFFC
1350	SKD113C	SKD213CF	SKD313CFC	SKD413CFFC	SKD513CFFFC
1500	SKD115C	SKD215CF	SKD315CFC	SKD415CFFC	SKD515CFFFC

## 02 STORVIK<sup>SKD</sup> SKD DOUBLE GLAZED SIDE HUNG (NARROW MODULE)



HEIGHT	CODE	CODE	CODE	CODE	CODE
750	SKDN07C	SKD2N07CF	SKD3N07CFC	SKD4N07CFFC	SKD5N07CFFFC
900	SKDN09C	SKD2N09CF	SKD3N09CFC	SKD4N09CFFC	SKD5N09CFFFC
1050	SKDN10C	SKD2N10CF	SKD3N10CFC	SKD4N10CFFC	SKD5N10CFFFC
1200	SKDN12C	SKD2N12CF	SKD3N12CFC	SKD4N12CFFC	SKD5N12CFFFC
1350	SKDN13C	SKD2N13CF	SKD3N13CFC	SKD4N13CFFC	SKD5N13CFFFC
1500	SKDN15C	SKD2N15CF	SKD3N15CFC	SKD4N15CFFC	SKD5N15CFFFC

## 03 STORVIK<sup>SKD</sup> DOUBLE GLAZED TOP HUNG (STANDARD MODULE)



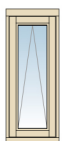
HEIGHT	CODE	CODE	CODE	CODE	CODE
600	SKD106A	SKD206AF	SKD306AFA	SKD406AFFA	SKD506AFFFA
750	SKD107A	SKD207AF	SKD307AFA	SKD407AFFA	SKD507AFFFA
900	SKD109A	SKD209AF	SKD309AFA	SKD409AFFA	SKD509AFFFA
1050	SKD110A	SKD210AF	SKD310AFA	SKD410AFFA	SKD510AFFFA
1200	SKD112A	SKD212AF	SKD312AFA	SKD412AFFA	SKD512AFFFA
1350	SKD113A	SKD213AF	SKD313AFA	SKD413AFFA	SKD513AFFFA

**NOTE:** All glazed frames now include low-E 24mm glazing. Frames 1500mm high or above, include low-E toughened glass. Window sizes shown are nominal and are approx 5mm to 10mm less than the size shown depending on sash configuration to allow for building in. All illustrations above tables show exterior views.

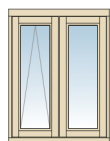
 Fire Escape Windows will be fitted with Fire Escape Hinges.



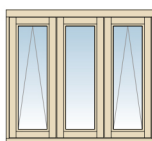
## 04 STORVIK<sup>SKD</sup> DOUBLE GLAZED TOP HUNG (NARROW MODULE)



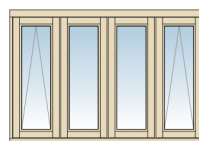
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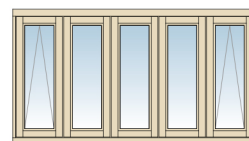
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HEIGHT	CODE	CODE	CODE	CODE	CODE
600	SKDN06A	SKD2N06AF	SKD3N06AFA	SKD4N06AFFA	SKD5N06AFFFA
750	SKDN07A	SKD2N07AF	SKD3N07AFA	SKD4N07AFFA	SKD5N07AFFFA
900	SKDN09A	SKD2N09AF	SKD3N09AFA	SKD4N09AFFA	SKD5N09AFFFA
1050	SKDN10A	SKD2N10AF	SKD3N10AFA	SKD4N10AFFA	SKD5N10AFFFA
1200	SKDN12A	SKD2N12AF	SKD3N12AFA	SKD4N12AFFA	SKD5N12AFFFA
1350	SKDN13A	SKD2N13AF	SKD3N13AFA	SKD4N13AFFA	SKD5N13AFFFA

## 05 STORVIK<sup>SKD</sup> DOUBLE GLAZED STANDARD VENT (STANDARD MODULE)



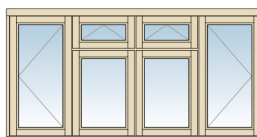
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1200



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HEIGHT	CODE	CODE	CODE	CODE	CODE
1050	SKD110V	SKD210CV	SKD310CVC	SKD410CVC	SKD510CVWC
1200	SKD112V	SKD212CV	SKD312CVC	SKD412CVC	SKD512CVWC
1350	SKD113V	SKD213CV	SKD313CVC	SKD413CVC	SKD513CVWC
1500	SKD115V	SKD215CV	SKD315CVC	SKD415CVC	SKD515CVWC

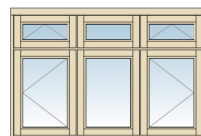
## 06 STORVIK<sup>SKD</sup> DOUBLE GLAZED STANDARD VENT (STANDARD MODULE) CONT'



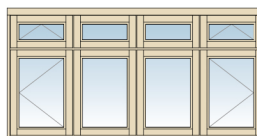
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1200



1770



2340



2913

HEIGHT	CODE	CODE	CODE	CODE	CODE
1050	SKD110T	SKD210TX	SKD310TXT	SKD410TXXT	SKD510TXXXT
1200	SKD112T	SKD212TX	SKD312TXT	SKD412TXXT	SKD512TXXXT
1350	SKD113T	SKD213TX	SKD313TXT	SKD413TXXT	SKD513TXXXT
1500	SKD115T	SKD215TX	SKD315TXT	SKD415TXXT	SKD515TXXXT

**NOTE:** All glazed frames now include low-E 24mm glazing. Frames 1500mm high or above, include low-E toughened glass. Window sizes shown are nominal and are approx 5mm to 10mm less than the size shown depending on sash configuration to allow for building in. All illustrations above tables show exterior views.

Fire Escape Windows will be fitted with Fire Escape Hinges.



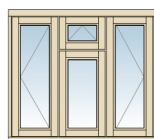
## 07 STORVIK<sup>SKD</sup> DOUBLE GLAZED STANDARD VENT (NARROW MODULE)



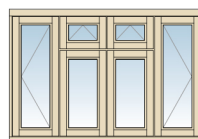
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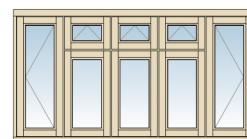
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HEIGHT	CODE	CODE	CODE	CODE	CODE
1050	SKDN12V	SKD2N12CV	SKD3N12CVC	SKD4N12CVC	SKD5N12CVC
1200	SKDN15V	SKD2N15CV	SKD3N15CVC	SKD4N15CVC	SKD5N15CVC
1350	SKDN13V	SKD2N13CV	SKD3N13CVC	SKD4N13CVC	SKD5N13CVC
1500	SKDN15V	SKD2N15CV	SKD3N15CVC	SKD4N15CVC	SKD5N15CVC

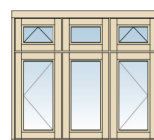
## 08 STORVIK<sup>SKD</sup> DOUBLE GLAZED STANDARD VENT (NARROW MODULE) CONT'



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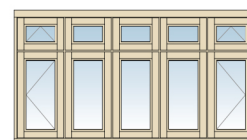
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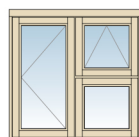
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HEIGHT	CODE	CODE	CODE	CODE	CODE
1050	SKDN10T	SKD2N10TX	SKD3N10TXT	SKD4N10TXXT	SKD5N10TXXXT
1200	SKDN12T	SKD2N12TX	SKD3N12TXT	SKD4N12TXXT	SKD5N12TXXXT
1350	SKDN13T	SKD2N13TX	SKD3N13TXT	SKD4N13TXXT	SKD5N13TXXXT
1500	SKDN15T	SKD2N15TX	SKD3N15TXT	SKD4N15TXXT	SKD5N15TXXXT

## 09 STORVIK<sup>SKD</sup> DOUBLE GLAZED DEEP VENT (STANDARD MODULE)



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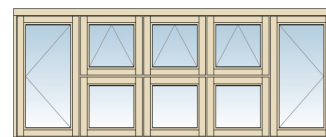
1200



1770



2340



2913

HEIGHT	CODE	CODE	CODE	CODE	CODE
900	SKD109D	SKD209CD	SKD309CDC	SKD409CDDC	SKD509CDDDC
1050	SKD110D	SKD210CD	SKD310CDC	SKD410CDDC	SKD510CDDDC
1200	SKD112D	SKD212CD	SKD312CDC	SKD412CDDC	SKD512CDDDC
1350	SKD113D	SKD213CD	SKD313CDC	SKD413CDDC	SKD513CDDDC
1500	SKD115D	SKD215CD	SKD315CDC	SKD415CDDC	SKD515CDDDC

**NOTE:** All glazed frames now include low-E 24mm glazing. Frames 1500mm high or above, include low-E toughened glass. Window sizes shown are nominal and are approx 5mm to 10mm less than the size shown depending on sash configuration to allow for building in. All illustrations above tables show exterior views.



Fire Escape Windows will be fitted with Fire Escape Hinges.



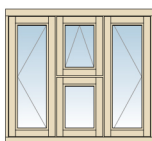
## 10 STORVIK<sup>SKD</sup> DOUBLE GLAZED DEEP VENT (NARROW MODULE)



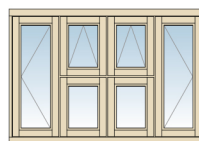
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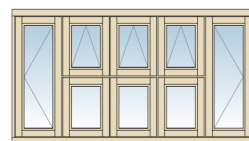
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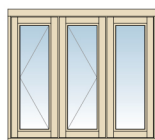
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HEIGHT	CODE	CODE	CODE	CODE	CODE
900	SKDN09D	SKD2N09CD	SKD3N09CDC	SKD4N09CDDC	SKD5N09CDDDC
1050	SKDN10D	SKD2N10CD	SKD3N10CDC	SKD4N10CDDC	SKD5N10CDDDC
1200	SKDN12D	SKD2N12CD	SKD3N12CDC	SKD4N12CDDC	SKD5N12CDDDC
1350	SKDN13D	SKD2N13CD	SKD3N13CDC	SKD4N13CDDC	SKD5N13CDDDC
1500	SKDN15D	SKD2N15CD	SKD3N15CDC	SKD4N15CDDC	SKD5N15CDDDC

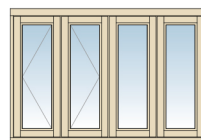
## 11 STORVIK<sup>SKD</sup> DOUBLE GLAZED (NARROW MODULE) ESCAPE WINDOW



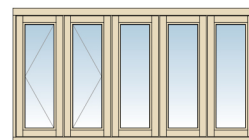
915



1344



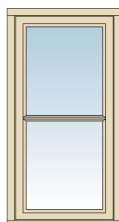
1770



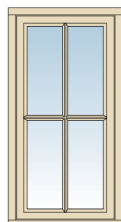
2198

HEIGHT	CODE	CODE	CODE	CODE
900	ESKD2N09CC 	ESKD3N09CCF 	ESKD4N09CCFF 	ESKD5N09CCFFF 
1050	ESKD2N10CC 	ESKD3N10CCF 	ESKD4N10CCFF 	ESKD5N10CCFFF 
1200	ESKD2N12CC 	ESKD3N12CCF 	ESKD4N12CCFF 	ESKD5N12CCFFF 
1350	ESKD2N13CC 	ESKD3N13CCF 	ESKD4N13CCFF 	ESKD5N13CCFFF 
1500	ESKD2N15CC 	ESKD3N15CCF 	ESKD4N15CCFF 	ESKD5N15CCFFF 

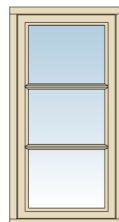
## 12 STORVIK<sup>SKD</sup> BAR OPTIONS



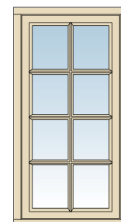
SKDH



SKDC



SKD2B



SKDDB

BAR OPTION	HORIZONTAL BAR	COTTAGE BAR	TWO BAR	GEORGIAN BAR
	SKDH	SKDC	SKD2B	SKDDB

**NOTE:** All glazed frames now include low-E 24mm glazing. Frames 1500mm high or above, include low-E toughened glass. Window sizes shown are nominal and are approx 5mm to 10mm less than the size shown depending on sash configuration to allow for building in. All illustrations above tables show exterior views.



Fire Escape Windows will be fitted with Fire Escape Hinges.



# STORVIK BAY WINDOWS

## 13 SQUARE BAYS

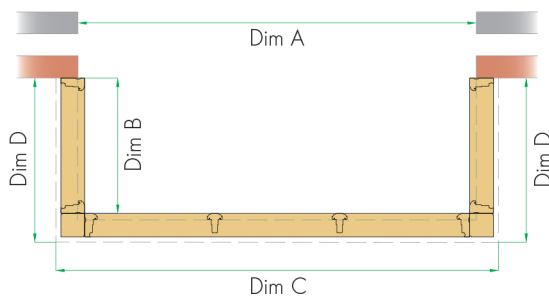
### Standard Module

CODE	DIMENSION			
	A	B	C	D
SQSK1	680	620	884	752
SQSK2	1252	620	1456	752
SQSK3	1824	620	2028	752
SQSK4	2396	620	2600	752
SQSK5	2968	620	3172	752

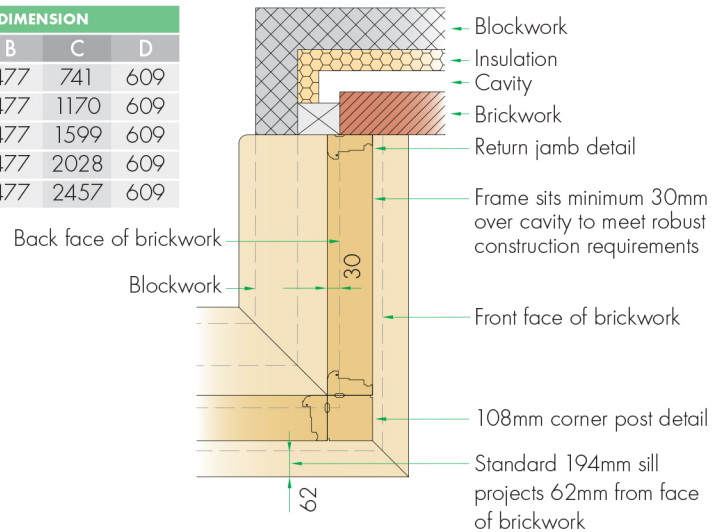
### Narrow Module

CODE	DIMENSION			
	A	B	C	D
SQSK1N	537	477	741	609
SQSK2N	966	477	1170	609
SQSK3N	1395	477	1599	609
SQSK4N	1824	477	2028	609
SQSK5N	2253	477	2457	609

#### Dimensions



**NOTE:** Dashed line represents brickwork



## 14 60° SPLAYED BAYS

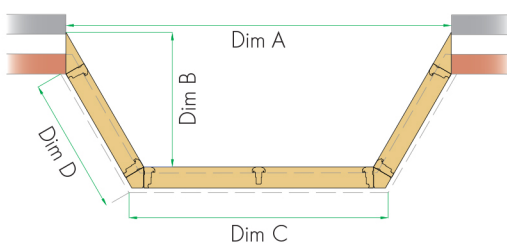
### 60° Standard Module

CODE	DIMENSION			
	A	B	C	D
SPSK1/60	1427	699	772	710
SPSK2/60	1999	699	1344	710
SPSK3/60	2571	699	1916	710
SPSK4/60	3143	699	2488	710
SPSK5/60	3715	699	3060	710

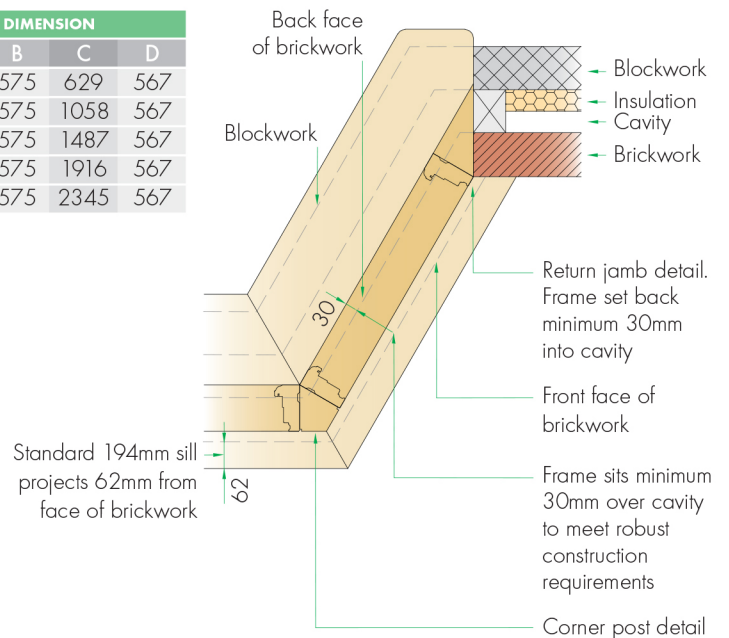
### 60° Narrow Module

CODE	DIMENSION			
	A	B	C	D
SPSK1N/60	1141	575	629	567
SPSK2N/60	1570	575	1058	567
SPSK3N/60	1999	575	1487	567
SPSK4N/60	2428	575	1916	567
SPSK5N/60	2857	575	2345	567

#### Dimensions



**NOTE:** Dashed line represents brickwork



**NOTE:** To comply with manual handling regulations, pre-glazed bays or combinations will be supplied in sections for final site assembly.



## 15 45° SPLAYED BAYS

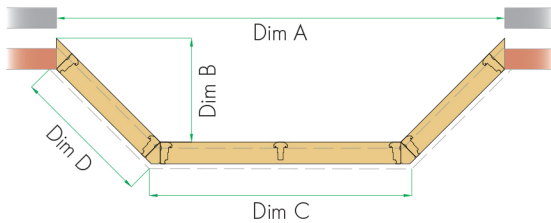
### 45° Standard Module

CODE	DIMENSION			
	A	B	C	D
SPSK1/45	1650	515	729	699
SPSK2/45	2222	515	1301	699
SPSK3/45	2794	515	1873	699
SPSK4/45	3366	515	2445	699
SPSK5/45	3938	515	3017	699

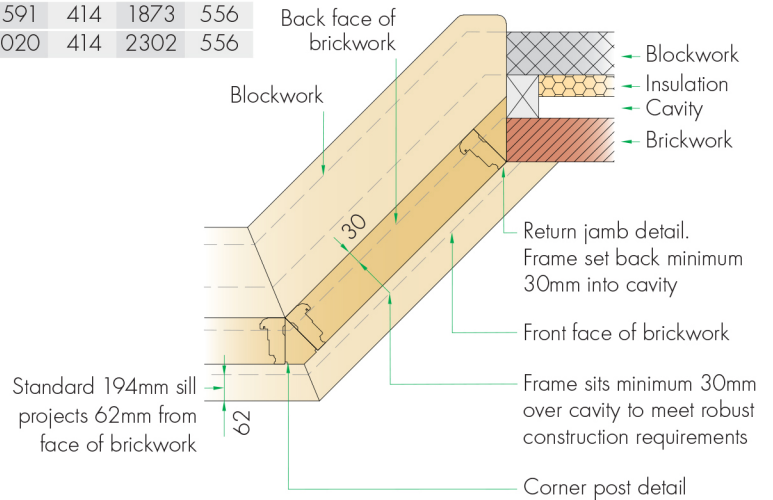
### 45° Narrow Module

CODE	DIMENSION			
	A	B	C	D
SPSK1N/45	1304	414	586	556
SPSK2N/45	1733	414	1015	556
SPSK3N/45	2162	414	1444	556
SPSK4N/45	2591	414	1873	556
SPSK5N/45	3020	414	2302	556

#### Dimensions



**NOTE:** Dashed line represents brickwork



## 16 30° SPLAYED BAYS

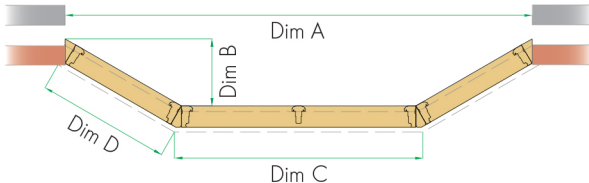
### 30° Standard Module

CODE	DIMENSION			
	A	B	C	D
SPSK1/30	1802	341	691	682
SPSK2/30	2374	341	1263	682
SPSK3/30	2946	341	1835	682
SPSK4/30	3518	341	2407	682
SPSK5/30	4090	341	2979	682

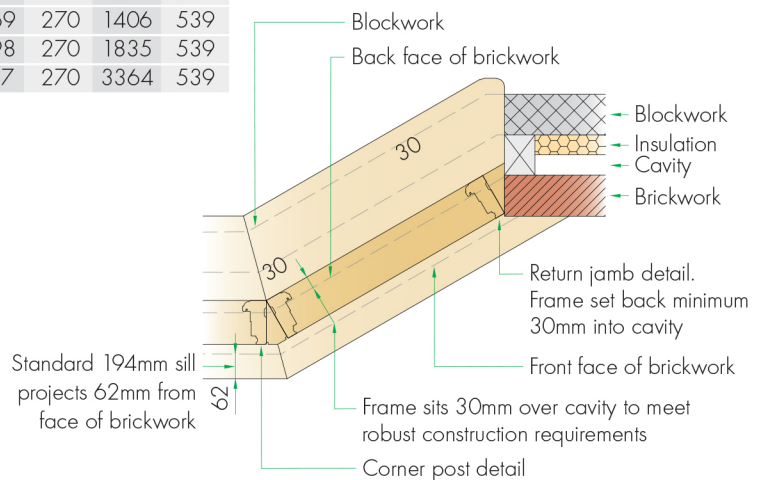
### 30° Narrow Module

CODE	DIMENSION			
	A	B	C	D
SPSK1N/30	1411	270	548	539
SPSK2N/30	1840	270	977	539
SPSK3N/30	2269	270	1406	539
SPSK4N/30	2698	270	1835	539
SPSK5N/30	3127	270	3364	539

#### Dimensions



**NOTE:** Dashed line represents brickwork



**NOTE:** To comply with manual handling regulations, pre-glazed bays or combinations will be supplied in sections for final site assembly.



## 17 STORVIK<sup>SKD</sup> WINDOW OPTIONS

### 1. Night ventilators

All windows between 488mm and 914mm include 4600mm<sup>2</sup> equivalent area of ventilation. All windows 915mm wide and over include 9200mm<sup>2</sup> equivalent area of ventilation. Please specify if you require only 4600mm<sup>2</sup> or no ventilation.

### 2. Sills

The standard sill width is 194mm to allow the frame to be set back into the cavity to meet Part L Robust Construction Detail requirements. Other available sill width options are 108mm flush sills and 144mm stub sills, or 244mm extended sills.

Larger sills have a tendency to cup, twist or split. These risks are greater on south facing elevations or if decorated with a dark top coat. Where a frame needs to be set back into the wall to avoid cold bridging, we recommend that a flush or a stub sill is used in conjunction with a stone or canted brick sill. **Consequently, we do not guarantee extended sills.**

### 3. Finishing options

Frames are available in any of our standard finishes

Frames are also generally available in standard RAL colours except black. For availability of other darker shades please contact the Sales Office on 01469 530577.

### 4. Combination door and window frames are available

### 5. Bay Windows

Bays are available in the Storvik range excluding shallow and deep circular.

### 6. Repair kits for fully finished windows

Includes paint or stain, brush, sandpaper, tube of filler and instructions. Will cover 0.5m<sup>2</sup>.

### 7. Cavity closers in loose lengths are available

### 8. Window furniture and locking mechanisms

A range of furniture options is available.

Available in a range of colour options. White and Black in one price group. Polished Chrome effect, Satin Chrome effect and Gold effect are available at an extra cost.

Windows are fitted with S.B.D. shootbolt locking systems and reflex hinges.

#### Shootbolt locking

Locking mechanisms are user adjustable by the purchaser to allow for slight movement which can occur naturally within timber profiles, or any alignment change which may have occurred to the sash during the transport or installation of the frame.

### 9. Secured by Design

STORVIK<sup>SKD</sup> windows are supplied to achieve PAS24:1012 Secured by Design requirements and are audited to ensure continuing compliance as part of our BSI Kitemark Scheme. Some sizes may exceed tested dimensions. For full details on which frames meet S.B.D., please contact our Sales Office on 01469 530577.

### 10. Restrictor stays

Concealed restrictor stays are available.

### 11. Cambered heads

One per window produced in non-laminated Redwood are available. One will be supplied per frame unless otherwise requested.

### 12. Perimeter pinch battens

For installing frames into timber frame buildings. These are available made from non-laminated Redwood. They are fitted to the jambs and heads of the frame unless otherwise requested.

### 13. Shrink wrapping

Frames are wrapped as standard in a clear cling film which permits visual inspection of the frame upon delivery.

### 14. Tolerances

On the STORVIK<sup>SKD</sup> range the 'brick work' tolerances vary between 5 and 10mm allowing for consistent sash widths.

### 15. Quotation prices

Quotation prices do not include VAT which will be charged at the rate applicable at the time of delivery. Prices quoted are subject to Howarth's Standard Terms and Conditions of Sale.

### 16. Deliveries

All ancillary purchases are subject to a post and packing charge. Orders of £1,000 or less will be subject to a delivery charge.



**NOTE:** All glazed frames now include low-E 24mm glazing. Frames 1500mm high or above, include low-E toughened glass.







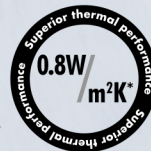
# NEW UPGRADED STORVIK<sup>SKT</sup> TRIPLE GLAZED RANGE

## A RANGE OF TRIPLE GLAZED TIMBER WINDOWS MEETING THE MOST EXACTING SPECIFICATIONS

- Improved thermal performance.

- Window energy ratings A to C.

- Efficient 44mm triple glazed unit with Ultra Low STORVIK<sup>SKT</sup> U-Values to 0.8 W/m<sup>2</sup>K.



- Quality laminated Redwood Nordic Pine construction.

- Manufactured from the finest FSC® accredited timber on request.

- Slim profile, flush fit styling enables window furniture to be concealed.

- BRE Green Guide A+ Rated.

- High security Secured by Design locking system fitted as standard.

- European Conformity.



- Supplied fully finished in our extended range of paints and stains.

- Extensive guarantees for long-lasting peace of mind.

- Incorporating Swisspacer ULTIMATE, the leading warm edge spacer fitted where appropriate.

**SWISSPACER**  
SAINT GOBAIN



# THE ULTRA LOW U-VALUE **STORVIK<sup>SKT</sup>** TRIPLE GLAZED RANGE

Designed to meet the expanding requirements for enhanced thermal performance, the Howarth STORVIK<sup>SKT</sup> Triple Glazed range uses the very best materials and techniques to ensure that every product meets the U-Values increasingly demanded by growing sectors of the market.

These low U-Values are achieved by using a 44mm triple glazed unit that increases the frames thermal capabilities, meaning it can reach as low as 0.8 W/m<sup>2</sup>K for thermal performance.

In addition, the Howarth STORVIK<sup>SKT</sup> Triple Glazed range also earns an A+ Rating from the BRE Green Guide for environmental performance.

Based on our popular flush fit styling, the Triple Glazed STORVIK<sup>SKT</sup> window will fit into any traditional or contemporary development.

All main frame components and sashes are manufactured using clear-faced

laminated Redwood for enhanced strength and durability, as well as providing a clear knot-free finish. It should be noted though, that all plant-on sections, sill and head drips are made from non-laminated Redwood which may contain knots.

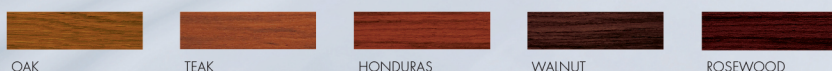
The upgraded Howarth STORVIK<sup>SKT</sup> window is environmental advantages too. Improved thermal performance means that less energy is needed to heat buildings, thus reducing the environmental impact. Frames can also be manufactured from FSC® accredited timber with full chain of custody for sustainability.



## FINISHING OPTIONS

Choose from a range of paint and stain finishes with built-in high performance, endurance and quality,

### Standard Stain Finishes



### Standard Paint Finishes



**NOTE:** All Howarth paint/stain finishes are silk and not high gloss.

**NOTE:** Frames are generally available in standard RAL colours except black. For availability of other darker shades please contact the Sales Office on 01469 530577.

## GUARANTEES

As a result of the improved stability of laminated timber construction we are able to provide guarantees for ten years on our paint finish and six years on our stain finish.



**NOTE:** All guarantees given in this catalogue are subject to limitations and are strictly dependent upon compliance with manufacturers' usage and maintenance instructions. These are available upon request.





(Left) The STORVIK<sup>SKT</sup> Triple Glazed range incorporates 44mm triple glazed units to improve thermal performance.

(Below left) The STORVIK<sup>SKT</sup> Triple Glazed range design incorporates an improved deeper drip head design.

(Right) The STORVIK<sup>SKT</sup> Triple Glazed range design incorporates a slim modern and clean profile.



**NOTE:**

Lead and bar options  
are not available on  
STORVIK<sup>SKT</sup>  
due to parallax  
limitations.



## SECURED BY DESIGN

The upgraded STORVIK<sup>SKT</sup> windows are manufactured to the demanding standards of Secured by Design, dependent on the size and configuration of the window frame. For full details on which frames comply with S.B.D, please contact the Sales Office on 01469 530577.

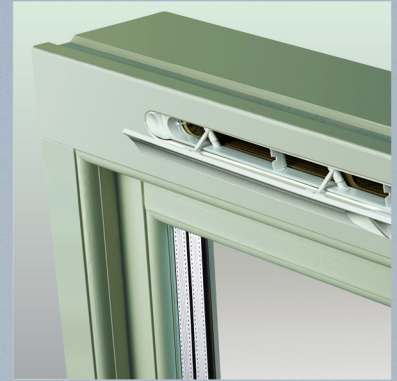


As with all Howarth windows, the STORVIK<sup>SKT</sup> window range is manufactured to strict guidelines set out by the British Woodworking Federation's Timber Window Accreditation Scheme, ensuring the best quality products and the highest levels of performance.





(Left) The upgraded STORVIKSKT Triple Glazed range features S.B.D. shootbolt locking for optimal security. Face-Fixed handles are available in White or Black as standard or a choice of other colours as an optional extra.



(Above) The STORVIKSKT Triple Glazed range features a built in vent, shown in an open position and the new design utilises a thicker head section providing increased plaster line clearance.

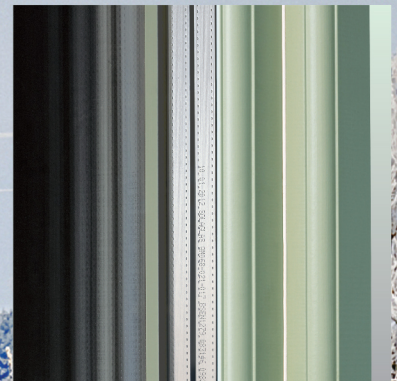


**Timber.** All timber used is laminated Redwood Nordic Pine from well managed yield sources.

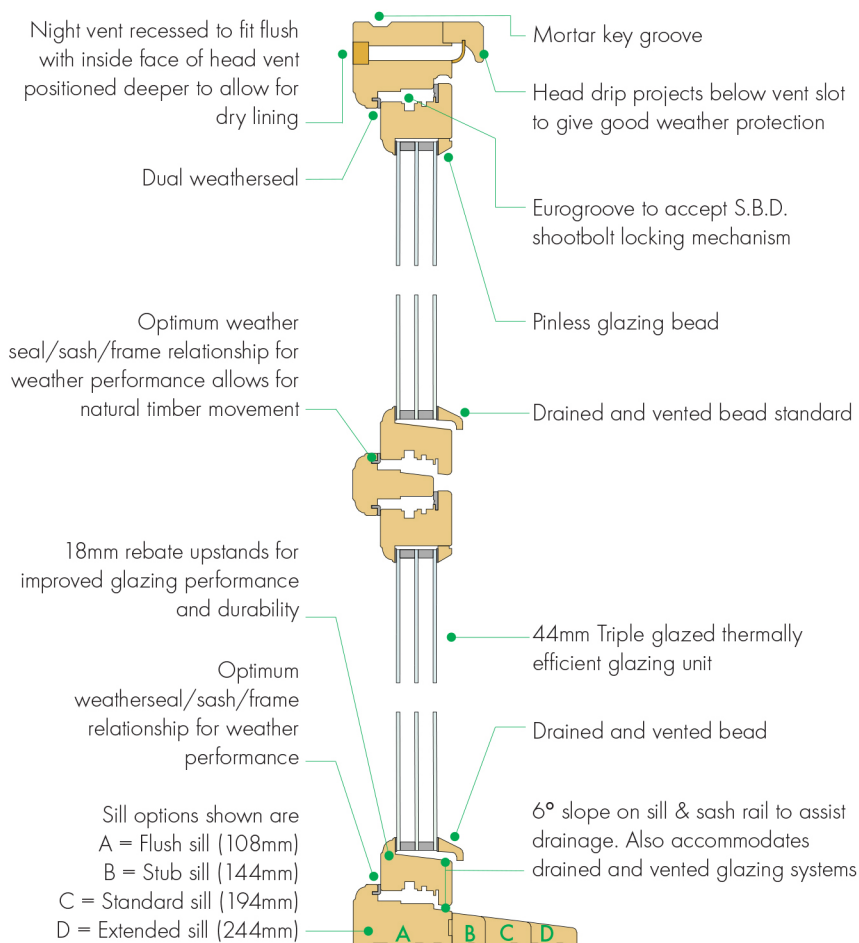


(Below) The STORVIKSKT Triple Glazed range features a stylish profile to enhance the internal appearance.

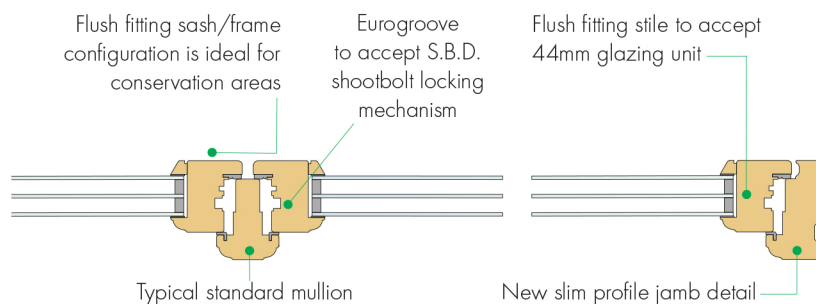
(Bottom) The STORVIKSKT Triple Glazed window range features reflex hinges for ease of use.







## CROSS SECTION THROUGH HORIZONTAL



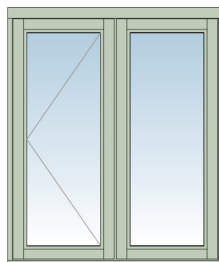
## CE MARKING



## THERMAL PERFORMANCE

	Benchmark U-Value	W.E.R. Rating
Energy Ultra	1.1	A
Energy Plus	1.1	A
Energy	1.3	B
Energy Ultra U	0.8	B

Benchmark Window  
 1230mm wide  
 x  
 1480mm high



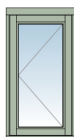
## PRODUCT RANGE

- 18 STORVIK<sup>SKT</sup> TRIPLE GLAZED SIDE HUNG (STANDARD MODULE)
- 19 STORVIK<sup>SKT</sup> TRIPLE GLAZED SIDE HUNG (NARROW MODULE)
- 20 STORVIK<sup>SKT</sup> TRIPLE GLAZED TOP HUNG (STANDARD MODULE)
- 21 STORVIK<sup>SKT</sup> TRIPLE GLAZED TOP HUNG (NARROW MODULE)
- 22 STORVIK<sup>SKT</sup> TRIPLE GLAZED STANDARD VENT (STANDARD MODULE)
- 23 STORVIK<sup>SKT</sup> TRIPLE GLAZED STANDARD VENT (STANDARD MODULE) CONT'
- 24 STORVIK<sup>SKT</sup> TRIPLE GLAZED STANDARD VENT (NARROW MODULE)
- 25 STORVIK<sup>SKT</sup> TRIPLE GLAZED STANDARD VENT (NARROW MODULE) CONT'
- 26 STORVIK<sup>SKT</sup> TRIPLE GLAZED DEEP VENT (STANDARD MODULE)
- 27 STORVIK<sup>SKT</sup> TRIPLE GLAZED DEEP VENT (NARROW MODULE)
- 28 STORVIK<sup>SKT</sup> TRIPLE GLAZED NARROW MODULE ESCAPE WINDOW
- 29 STORVIK<sup>SKT</sup> WINDOW OPTIONS

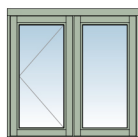


**NOTE:** Results generated by Howarth to determine energy ratings are conducted using the rules and procedures used by the BFRC and are based upon the BFRC standard specification and frame sizes for such calculations.

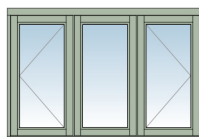
18

**STORVIK<sup>SKT</sup> TRIPLE GLAZED SIDE HUNG (STANDARD MODULE)**

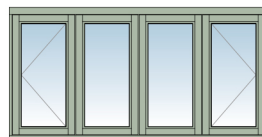
630



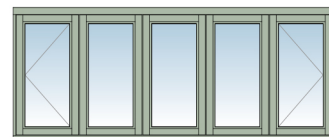
1200



1770



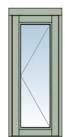
2340



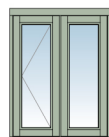
2913

HEIGHT	CODE	CODE	CODE	CODE	CODE
750	SKT107C	SKT207CF	SKT307CFC	SKT407CFFC	SKT507CFFFC
900	SKT109C	SKT209CF	SKT309CFC	SKT409CFFC	SKT509CFFFC
1050	SKT110C	SKT210CF	SKT310CFC	SKT410CFFC	SKT510CFFFC
1200	SKT112C	SKT212CF	SKT312CFC	SKT412CFFC	SKT512CFFFC
1350	SKT113C	SKT213CF	SKT313CFC	SKT413CFFC	SKT513CFFFC

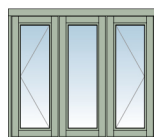
19

**STORVIK<sup>SKT</sup> TRIPLE GLAZED SIDE HUNG (NARROW MODULE)**

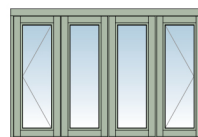
488



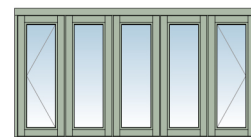
915



1344



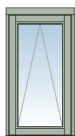
1770



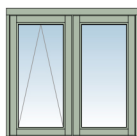
2198

HEIGHT	CODE	CODE	CODE	CODE	CODE
750	SKTN07C	SKT2N07CF	SKT3N07CFC	SKT4N07CFFC	SKT5N07CFFFC
900	SKTN09C	SKT2N09CF	SKT3N09CFC	SKT4N09CFFC	SKT5N09CFFFC
1050	SKTN10C	SKT2N10CF	SKT3N10CFC	SKT4N10CFFC	SKT5N10CFFFC
1200	SKTN12C	SKT2N12CF	SKT3N12CFC	SKT4N12CFFC	SKT5N12CFFFC
1350	SKTN13C	SKT2N13CF	SKT3N13CFC	SKT4N13CFFC	SKT5N13CFFFC

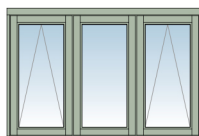
20

**STORVIK<sup>SKT</sup> TRIPLE GLAZED TOP HUNG (STANDARD MODULE)**

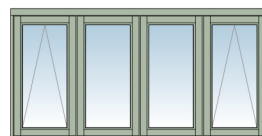
630



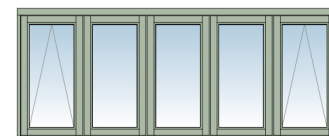
1200



1770



2340



2913

HEIGHT	CODE	CODE	CODE	CODE	CODE
600	SKT106A	SKT206AF	SKT306AFA	SKT406AFFA	SKT506AFFFA
750	SKT107A	SKT207AF	SKT307AFA	SKT407AFFA	SKT507AFFFA
900	SKT109A	SKT209AF	SKT309AFA	SKT409AFFA	SKT509AFFFA
1050	SKT110A	SKT210AF	SKT310AFA	SKT410AFFA	SKT510AFFFA
1200	SKT112A	SKT212AF	SKT312AFA	SKT412AFFA	SKT512AFFFA

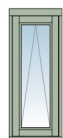
**NOTE:** All triple glazed frames now include low-E 44mm glazing. Window sizes shown are nominal and are approx 5mm to 10mm less than the size shown depending on sash configuration to allow for building in. All illustrations above tables show exterior views.



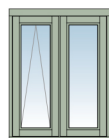
Fire Escape Windows will be fitted with Fire Escape Hinges.



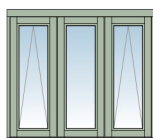
## 21 STORVIK<sup>SKT</sup> TRIPLE GLAZED TOP HUNG (NARROW MODULE)



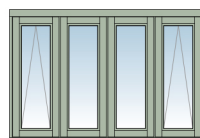
488



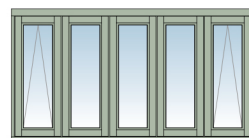
915



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2198

HEIGHT	CODE	CODE	CODE	CODE	CODE
600	SKTN06A	SKT2N06AF	SKT3N06AFA	SKT4N06AFFA	SKT5N06AFFFA
750	SKTN07A	SKT2N07AF	SKT3N07AFA	SKT4N07AFFA	SKT5N07AFFFA
900	SKTN09A	SKT2N09AF	SKT3N09AFA	SKT4N09AFFA	SKT5N09AFFFA
1050	SKTN10A	SKT2N10AF	SKT3N10AFA	SKT4N10AFFA	SKT5N10AFFFA
1200	SKTN12A	SKT2N12AF	SKT3N12AFA	SKT4N12AFFA	SKT5N12AFFFA

## 22 STORVIK<sup>SKT</sup> TRIPLE GLAZED STANDARD VENT (STANDARD MODULE)



630



1200



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2913

HEIGHT	CODE	CODE	CODE	CODE	CODE
1050	SKT110V	SKT210CV	SKT310CVC	SKT410CWC	SKT510CWVC
1200	SKT112V	SKT212CV	SKT312CVC	SKT412CWC	SKT512CWVC
1350	SKT113V	SKT213CV	SKT313CVC	SKT413CWC	SKT513CWVC

## 23 STORVIK<sup>SKT</sup> TRIPLE GLAZED STANDARD VENT (STANDARD MODULE) CONT'



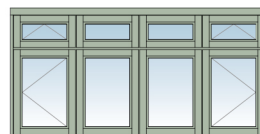
630



1200



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2913

HEIGHT	CODE	CODE	CODE	CODE	CODE
1050	SKT110T	SKT210TX	SKT310TXT	SKT410TXXT	SKT510TXXXT
1200	SKT112T	SKT212TX	SKT312TXT	SKT412TXXT	SKT512TXXXT
1350	SKT113T	SKT213TX	SKT313TXT	SKT413TXXT	SKT513TXXXT

**NOTE:** All triple glazed frames now include low-E 44mm glazing. Window sizes shown are nominal and are approx 5mm to 10mm less than the size shown depending on sash configuration to allow for building in. All illustrations above tables show exterior views.



Fire Escape Windows will be fitted with Fire Escape Hinges.

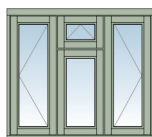
## 24 STORVIK<sup>SKT</sup> TRIPLE GLAZED STANDARD VENT (NARROW MODULE)



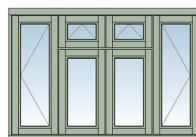
488



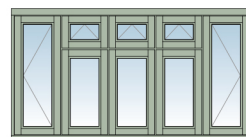
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HEIGHT	CODE	CODE	CODE	CODE	CODE
1050	SKTN10V	SKT2N10CV	SKT3N10CVC	SKT4N10CVC	SKT5N10CVC
1200	SKTN12V	SKT2N12CV	SKT3N12CVC	SKT4N12CVC	SKT5N12CVC
1350	SKTN13V	SKT2N13CV	SKT3N13CVC	SKT4N13CVC	SKT5N13CVC

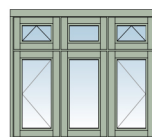
## 25 STORVIK<sup>SKT</sup> TRIPLE GLAZED STANDARD VENT (NARROW MODULE) CONT'



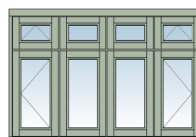
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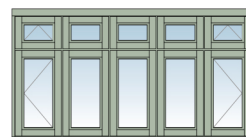
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HEIGHT	CODE	CODE	CODE	CODE	CODE
1050	SKTN10T	SKT2N10TX	SKT3N10TXT	SKT4N10TXX	SKT5N10TXXX
1200	SKTN12T	SKT2N12TX	SKT3N12TXT	SKT4N12TXX	SKT5N12TXXX
1350	SKTN13T	SKT2N13TX	SKT3N13TXT	SKT4N13TXX	SKT5N13TXXX

## 26 STORVIK<sup>SKT</sup> TRIPLE GLAZED DEEP VENT (STANDARD MODULE)



630



1200



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HEIGHT	CODE	CODE	CODE	CODE	CODE
900	SKT109D	SKT209CD	SKT309CDC	SKT409CDDC	SKT509CDDDC
1050	SKT110D	SKT210CD	SKT310CDC	SKT410CDDC	SKT510CDDDC
1200	SKT112D	SKT212CD	SKT312CDC	SKT412CDDC	SKT512CDDDC
1350	SKT113D	SKT213CD	SKT313CDC	SKT413CDDC	SKT513CDDDC

**NOTE:** All triple glazed frames now include low-E 44mm glazing. Window sizes shown are nominal and are approx 5mm to 10mm less than the size shown depending on sash configuration to allow for building in. All illustrations above tables show exterior views.



Fire Escape Windows will be fitted with Fire Escape Hinges.



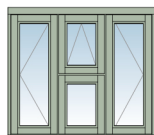
## 27 STORVIK<sup>SKT</sup> TRIPLE GLAZED DEEP VENT (NARROW MODULE)



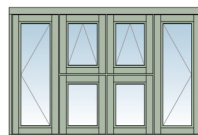
488



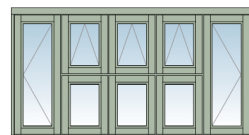
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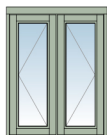
1770



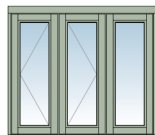
2198

HEIGHT	CODE	CODE	CODE	CODE	CODE
900	SKTN09D	SKT2N09CD	SKT3N09CDC	SKT4N09CDDC	SKT5N09CDDDC
1050	SKTN10D	SKT2N10CD	SKT3N10CDC	SKT4N10CDDC	SKT5N10CDDDC
1200	SKTN12D	SKT2N12CD	SKT3N12CDC	SKT4N12CDDC	SKT5N12CDDDC
1350	SKTN13D	SKT2N13CD	SKT3N13CDC	SKT4N13CDDC	SKT5N13CDDDC

## 28 STORVIK<sup>SKT</sup> TRIPLE GLAZED (NARROW MODULE) ESCAPE WINDOW



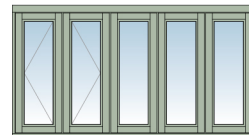
915


















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HEIGHT	CODE	CODE	CODE	CODE
900	ESKT2N09CC 	ESKT3N09CCF 	ESKT4N09CCFF 	ESKT5N09CCFF 
1050	ESKT2N10CC 	ESKT3N10CCF 	ESKT4N10CCFF 	ESKT5N10CCFF 
1200	ESKT2N12CC 	ESKT3N12CCF 	ESKT4N12CCFF 	ESKT5N12CCFF 
1350	ESKT2N13CC 	ESKT3N13CCF 	ESKT4N13CCFF 	ESKT5N13CCFF 



**NOTE:** All triple glazed frames now include low-E 44mm glazing. Window sizes shown are nominal and are approx 5mm to 10mm less than the size shown depending on sash configuration to allow for building in. All illustrations above tables show exterior views.



Fire Escape Windows will be fitted with Fire Escape Hinges.

### 1. Night ventilators

All windows between 488mm and 914mm include 4600mm<sup>2</sup> equivalent area of ventilation. All windows 915mm wide and over include 9200mm<sup>2</sup> equivalent area of ventilation. Please specify if only 4600mm<sup>2</sup> equivalent area of ventilation, or no ventilation, is needed.

### 2. Sills

The standard sill width is 194mm to allow the frame to be set back into the cavity to meet Part L Robust Construction Detail requirements. Other available sill width options are 108mm flush sills, 144mm stub sills and 244mm extended sills.

Larger sills have a tendency to cup, twist or split. These risks are greater on south facing elevations or if decorated with a dark top coat. Where a frame needs to be set back into the wall to avoid cold bridging, we recommend that a flush or a stub sill is used in conjunction with a stone or canted brick sill. Consequently, we do not guarantee extended sills.

### 3. Finishing options

Frames are available in any of our standard finishes

Frames are also generally available in standard RAL colours except black.

For availability of other darker shades please contact the Sales Office on 01469 530577.

### 4. Combination door and window frames are available

### 5. Bay Windows

Bays are available in the Storvik range excluding shallow and deep circular.

### 6. Repair kits for fully finished windows

Includes paint or stain, brush, sandpaper, tube of filler and instructions. Will cover 0.5m<sup>2</sup>.

### 7. Cavity closers in loose lengths are available

### 8. Window furniture and locking mechanisms

A range of furniture options is available,

Available in a range of colour options. White and Black in one price group. Polished Chrome effect, Satin Chrome effect and Gold effect are available at an extra cost.

Windows are fitted with S.B.D. shootbolt locking systems and reflex hinges.

### Shootbolt locking

Locking mechanisms are user adjustable by the purchaser to allow for slight movement which can occur naturally within timber profiles, or any alignment change which may have occurred to the sash during the transport or installation of the frame.

### 9. Secured by Design

STORVIK<sup>SKT</sup> windows are supplied to achieve PAS24:2012 Secured by Design requirements and are audited to ensure continuing compliance as part of our BSI Kitemark Scheme. Some sizes may exceed tested dimensions. For full details on which frames meet S.B.D, please contact our Sales Office on 01469 530577.

### 10. Restrictor stays

Concealed restrictor stays are available.

### 11. Cambered heads

One per window produced in non-laminated Redwood are available. One will be supplied per frame unless otherwise requested.

### 12. Perimeter pinch battens

For installing frames into timber frame buildings. These are available made from non-laminated Redwood. They are fitted to the jambs and heads of the frame unless otherwise requested.

### 13. Shrink wrapping

Frames are wrapped as standard in a clear cling film which permits visual inspection of the frame upon delivery.

### 14. Tolerances

On the STORVIK<sup>SKT</sup> frames this varies between 5mm and 10mm to allow for consistent sash widths.

### 15. Quotation prices

Quotation prices do not include VAT which will be charged at the rate applicable at the time of delivery. Prices quoted are subject to Howarth's Standard Terms and Conditions of Sale.

### 16. Deliveries

All ancillary purchases are subject to a post and packing charge. Orders of £1,000 or less will be subject to a delivery charge.



**NOTE:** All triple glazed frames now include low-E 44mm glazing.