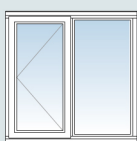
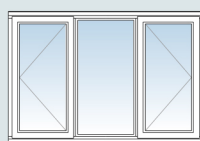




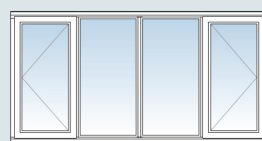
630



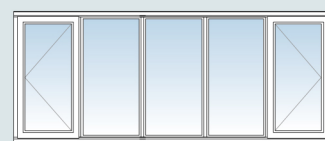
1200



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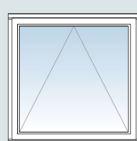


2900

HEIGHT	CODE	CODE	CODE	CODE	CODE
750	107C	207C	307CC	407CMC	507CMMC
900	109C	209C	309CC	409CMC	509CMMC
1050	110C	210C	310CC	410CMC	510CMMC
1200	112C	212C	312CC	412CMC	512CMMC
1350	113C	213C	313CC	413CMC	513CMMC
1500	115C	215C	315CC	415CMC	515CMMC



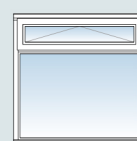
630



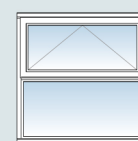
1200



630



1200

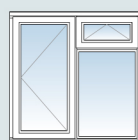


1200

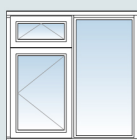
HEIGHT	CODE	CODE	CODE	CODE	CODE
450	104A	204A			
600	106A	206A			
750	107A	207A	107V	207W	207D
900	109A	209A	109V	209W	209D
1050	110A	210A	110V	210W	210D
1200	112A	212A	112V	212W	212D
1350	113A	213A	113V	213W	213D
1500			115V	215W	215D



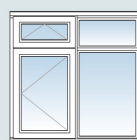
630



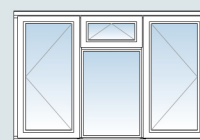
1200



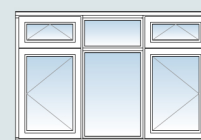
1200



1200

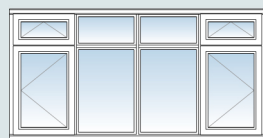


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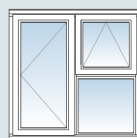


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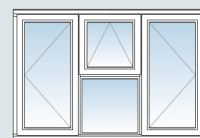
HEIGHT	CODE	CODE	CODE	CODE	CODE	CODE
750	107T	207CV	207T	207TX	307CVC	307TXT
900	109T	209CV	209T	209TX	309CVC	309TXT
1050	110T	210CV	210T	210TX	310CVC	310TXT
1200	112T	212CV	212T	212TX	312CVC	312TXT
1350	113T	213CV	213T	213TX	313CVC	313TXT
1500	115T	215CV	215T	215TX	315CVC	315TXT



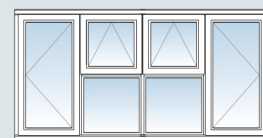
2340



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HEIGHT	CODE	CODE	CODE	CODE
750	407TXXT	207CD	307CDC	407CDDC
900	409TXXT	209CD	309CDC	409CDDC
1050	410TXXT	210CD	310CDC	410CDDC
1200	412TXXT	212CD	312CDC	412CDDC
1350	413TXXT	213CD	313CDC	413CDDC
1500	415TXXT	215CD	315CDC	415CDDC

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 less than the size shown to allow for building in. All illustrations above tables show exterior views.

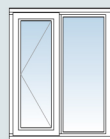


Fire Escape Windows will be fitted with Fire Escape Hinges.

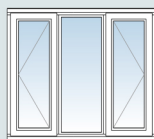
31 SIDE AND TOP HUNG CASEMENT NARROW



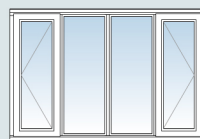
488



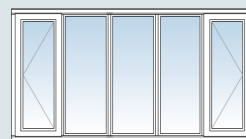
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HEIGHT	CODE	CODE	CODE	CODE	CODE
750	N07C	2N07C	3N07CC	4N07CMC	5N07CMMC
900	N09C	2N09C	3N09CC	4N09CMC	5N09CMMC
1050	N10C	2N10C	3N10CC	4N10CMC	5N10CMMC
1200	N12C	2N12C	3N12CC	4N12CMC	5N12CMMC
1350	N13C	2N13C	3N13CC	4N13CMC	5N13CMMC
1500	N15C	2N15C	3N15CC	4N15CMC	5N15CMMC



488



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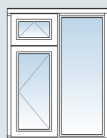
HEIGHT	CODE	CODE	CODE	CODE	CODE
450	N04A	2N04A			
600	N06A	2N06A			
750	N07A	2N07A	N07V	2N07W	2N07D
900	N09A	2N09A	N09V	2N09W	2N09D
1050	N10A	2N10A	N10V	2N10W	2N10D
1200	N12A	2N12A	N12V	2N12W	2N12D
1350	N13A	2N13A	N13V	2N13W	2N13D
1500			N15V	2N15W	2N15D



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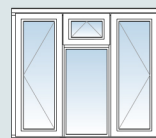
915



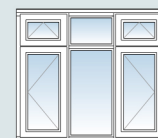
915



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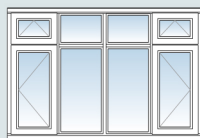


1344



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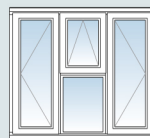
HEIGHT	CODE	CODE	CODE	CODE	CODE	CODE
750	N07T	2N07CV	2N07T	2N07TX	3N07CVC	3N07TXT
900	N09T	2N09CV	2N09T	2N09TX	3N09CVC	3N09TXT
1050	N10T	2N10CV	2N10T	2N10TX	3N10CVC	3N10TXT
1200	N12T	2N12CV	2N12T	2N12TX	3N12CVC	3N12TXT
1350	N13T	2N13CV	2N13T	2N13TX	3N13CVC	3N13TXT
1500	N15T	2N15CV	2N15T	2N15TX	3N15CVC	3N15TXT



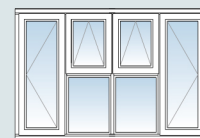
1770



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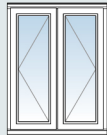
HEIGHT	CODE	CODE	CODE	CODE
750	4N07TXXT	2N07CD	3N07CDC	4N07CDDC
900	4N09TXXT	2N09CD	3N09CDC	4N09CDDC
1050	4N10TXXT	2N10CD	3N10CDC	4N10CDDC
1200	4N12TXXT	2N12CD	3N12CDC	4N12CDDC
1350	4N13TXXT	2N13CD	3N13CDC	4N13CDDC
1500	4N15TXXT	2N15CD	3N15CDC	4N15CDDC

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

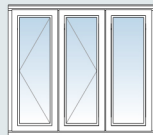
Window sizes shown are nominal and are approx 5mm less than the size shown to allow for building in.

All illustrations above tables show exterior views.

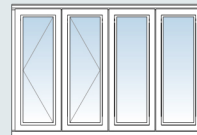
SIDE AND TOP HUNG CASEMENT NARROW (CONTINUED)



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FIRE ESCAPE:

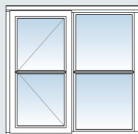
Windows marked with  will meet fire escape requirements.

HEIGHT	CODE	CODE	CODE
900	E2N09CC 	E3N09CCF 	E4N09CCFF 
1050	E2N10CC 	E3N10CCF 	E4N10CCFF 
1200	E2N12CC 	E3N12CCF 	E4N12CCFF 
1350	E2N13CC 	E3N13CCF 	E4N13CCFF 
1500	E2N15CC 	E3N15CCF 	E4N15CCFF 

32 HORIZONTAL BAR



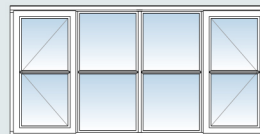
630



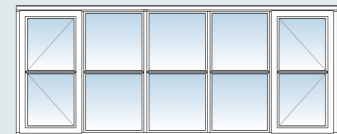
1200




























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HEIGHT	CODE	CODE	CODE	CODE	CODE
750	H107C	H207C	H307CC	H407CMC	H507CMMC
900	H109C 	H209C 	H309CC 	H409CMC 	H509CMMC 
1050	H110C 	H210C 	H310CC 	H410CMC 	H510CMMC 
1200	H112C 	H212C 	H312CC 	H412CMC 	H512CMMC 
1350	H113C 	H213C 	H313CC 	H413CMC 	H513CMMC 
1500	H115C 	H215C 	H315CC 	H415CMC 	H515CMMC 

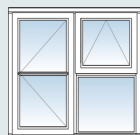
33 HORIZONTAL BAR DIVIDED SASH



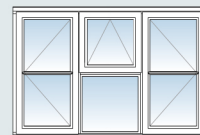
488



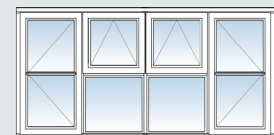
630




1200



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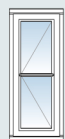
2340

HEIGHT	CODE	CODE	CODE	CODE	CODE
750	HN07D	H107D	H207CD	H307CDC	H407CDDC
900	HN09D	H109D	H209CD 	H309CDC 	H409CDDC 
1050	HN10D	H110D	H210CD 	H310CDC 	H410CDDC 
1200	HN12D	H112D	H212CD 	H312CDC 	H412CDDC 
1350	HN13D	H113D	H213CD 	H313CDC 	H413CDDC 
1500	HN15D	H115D	H215CD 	H315CDC 	H415CDDC 

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 less than the size shown to allow for building in. All illustrations above tables show exterior views.

 Fire Escape Windows will be fitted with Fire Escape Hinges.

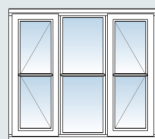
34 HORIZONTAL BAR NARROW



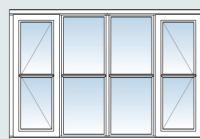
488



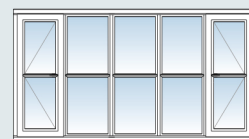
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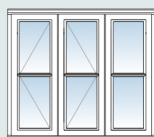


2190

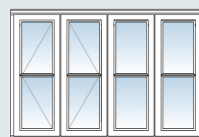
HEIGHT	CODE	CODE	CODE	CODE	CODE
750	HN07C	H2N07C	H3N07CC	H4N07CMC	H5N07CMMC
900	HN09C	H2N09C	H3N09CC	H4N09CMC	H5N09CMMC
1050	HN10C	H2N10C	H3N10CC	H4N10CMC	H5N10CMMC
1200	HN12C	H2N12C	H3N12CC	H4N12CMC	H5N12CMMC
1350	HN13C	H2N13C	H3N13CC	H4N13CMC	H5N13CMMC
1500	HN15C	H2N15C	H3N15CC	H4N15CMC	H5N15CMMC



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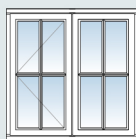
Horizontal Bar
Narrow Module
'Lookalike'
Escape Window

HEIGHT	CODE	CODE	CODE
900	EH2N09CC	EH3N09CCF	EH4N09CCFF
1050	EH2N10CC	EH3N10CCF	EH4N10CCFF
1200	EH2N12CC	EH3N12CCF	EH4N12CCFF
1350	EH2N13CC	EH3N13CCF	EH4N13CCFF
1500	EH2N15CC	EH3N15CCF	EH4N15CCFF

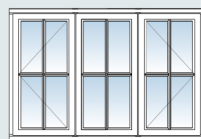
35 COTTAGE BAR



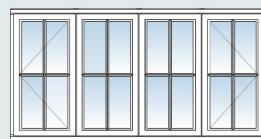
630



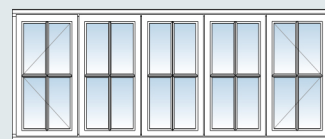
1200



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HEIGHT	CODE	CODE	CODE	CODE	CODE
750	C107C	C207C	C307CC	C407CMC	C507CMMC
900	C109C	C209C	C309CC	C409CMC	C509CMMC
1050	C110C	C210C	C310CC	C410CMC	C510CMMC
1200	C112C	C212C	C312CC	C412CMC	C512CMMC
1350	C113C	C213C	C313CC	C413CMC	C513CMMC
1500	C115C	C215C	C315CC	C415CMC	C515CMMC

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 less than the size shown to allow for building in. All illustrations above tables show exterior views.

Fire Escape Windows will be fitted with Fire Escape Hinges.

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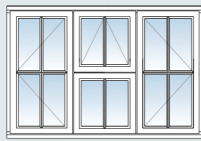
COTTAGE BAR DIVIDED SASH



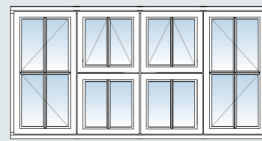
630



1200



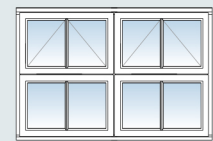
1770



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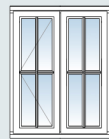
HEIGHT	CODE	CODE	CODE	CODE	CODE	CODE
750	C107D	C207CD	C307CDC	C407CDDC	C2N07D	C4N07DD
900	C109D	C209CD	C309CDC	C409CDDC	C2N09D	C4N09DD
1050	C110D	C210CD	C310CDC	C410CDDC	C2N10D	C4N10DD
1200	C112D	C212CD	C312CDC	C412CDDC	C2N12D	C4N12DD
1350	C113D	C213CD	C313CDC	C413CDDC	C2N13D	C4N13DD
1500	C115D	C215CD	C315CDC	C415CDDC	C2N15D	C4N15DD

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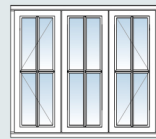
COTTAGE BAR NARROW CASEMENT



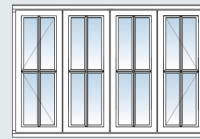
488



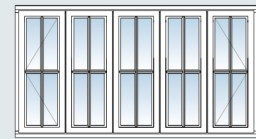
915



1344

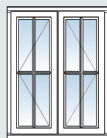


1770

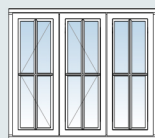


2190

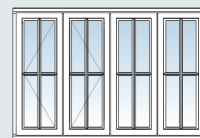
HEIGHT	CODE	CODE	CODE	CODE	CODE
750	CN07C	C2N07C	C3N07CC	C4N07CMC	C5N07CMMC
900	CN09C	C2N09C	C3N09CC	C4N09CMC	C5N09CMMC
1050	CN10C	C2N10C	C3N10CC	C4N10CMC	C5N10CMMC
1200	CN12C	C2N12C	C3N12CC	C4N12CMC	C5N12CMMC
1350	CN13C	C2N13C	C3N13CC	C4N13CMC	C5N13CMMC
1500	CN15C	C2N15C	C3N15CC	C4N15CMC	C5N15CMMC



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Cottage Bar
Narrow Module
'Lookalike'
Escape Window

HEIGHT	CODE	CODE	CODE
900	EC2N09CC	EC3N09CCF	EC4N09CCFF
1050	EC2N10CC	EC3N10CCF	EC4N10CCFF
1200	EC2N12CC	EC3N12CCF	EC4N12CCFF
1350	EC2N13CC	EC3N13CCF	EC4N13CCFF
1500	EC2N15CC	EC3N15CCF	EC4N15CCFF

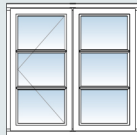
NOTE: All glazed frames now include low-E 24mm glazing. Frames 1500mm high or above, include low-E toughened glass. Window sizes shown are nominal and are approx 5mm less than the size shown to allow for building in. All illustrations above tables show exterior views.

Fire Escape Windows will be fitted with Fire Escape Hinges.

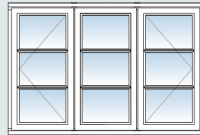
38 TWO BAR



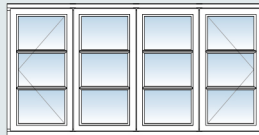
630



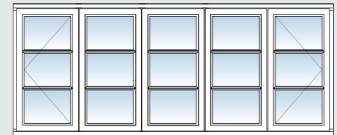
1200



1770



2340



2900

HEIGHT	CODE	CODE	CODE	CODE	CODE
750	2B107C	2B207C	2B307CC	2B407CMC	2B507CMMC
900	2B109C	2B209C	2B309CC	2B409CMC	2B509CMMC
1050	2B110C	2B210C	2B310CC	2B410CMC	2B510CMMC
1200	2B112C	2B212C	2B312CC	2B412CMC	2B512CMMC
1350	2B113C	2B213C	2B313CC	2B413CMC	2B513CMMC
1500	2B115C	2B215C	2B315CC	2B415CMC	2B515CMMC

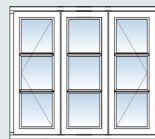
39 TWO BAR NARROW



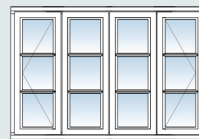
488



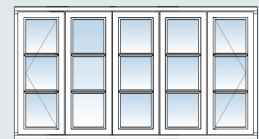
915



1344



1770



2190


HEIGHT	CODE	CODE	CODE	CODE	CODE
750	2BN07C	2B2N07C	2B3N07CC	2B4N07CMC	2B5N07CMMC
900	2BN09C	2B2N09C	2B3N09CC	2B4N09CMC	2B5N09CMMC
1050	2BN10C	2B2N10C	2B3N10CC	2B4N10CMC	2B5N10CMMC
1200	2BN12C	2B2N12C	2B3N12CC	2B4N12CMC	2B5N12CMMC
1350	2BN13C	2B2N13C	2B3N13CC	2B4N13CMC	2B5N13CMMC
1500	2BN15C	2B2N15C	2B3N15CC	2B4N15CMC	2B5N15CMMC



(Left) Gibbs Court, Crewkerne, Somerset.
Photograph courtesy of ROK Build.



FIRE ESCAPE:

Windows marked with  will meet fire escape requirements.

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 less than the size shown to allow for building in. All illustrations above tables show exterior views.

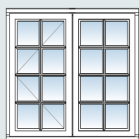
 Fire Escape Windows will be fitted with Fire Escape Hinges.

40

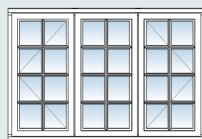
GEORGIAN BAR



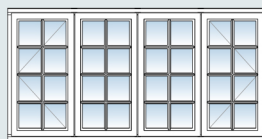
630



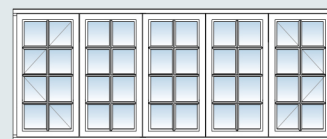
1200



1770



2340



2900

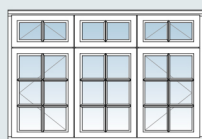
HEIGHT	CODE	CODE	CODE	CODE	CODE
750	DB107C	DB207C	DB307CC	DB407CMC	DB507CMMC
900	DB109C	DB209C	DB309CC	DB409CMC	DB509CMMC
1050	DB110C	DB210C	DB310CC	DB410CMC	DB510CMMC
1200	DB112C	DB212C	DB312CC	DB412CMC	DB512CMMC
1350	DB113C	DB213C	DB313CC	DB413CMC	DB513CMMC
1500	DB115C	DB215C	DB315CC	DB415CMC	DB515CMMC



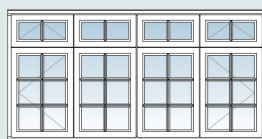
630



1200



1770



2340

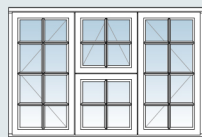
HEIGHT	CODE	CODE	CODE	CODE
1050	DB110T	DB210TX	DB310TXT	DB410TXXT
1200	DB112T	DB212TX	DB312TXT	DB412TXXT
1350	DB113T	DB213TX	DB313TXT	DB413TXXT
1500	DB115T	DB215TX	DB315TXT	DB415TXXT



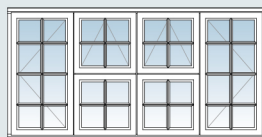
630



1200



1770



2340

HEIGHT	CODE	CODE	CODE	CODE
1200	DB112D	DB212CD	DB312CDC	DB412CDDC
1350	DB113D	DB213CD	DB313CDC	DB413CDDC

NOTE: Style only available in 1200mm and 1350mm heights to allow bars to line through.

41

GEORGIAN BAR NARROW



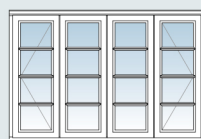
488



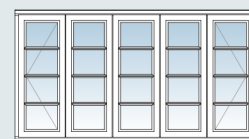
915



1344



1770



2190

HEIGHT	CODE	CODE	CODE	CODE	CODE
750	DBN07C	DB2N07C	DB3N07CC	DB4N07CMC	DB5N07CMMC
900	DBN09C	DB2N09C	DB3N09CC	DB4N09CMC	DB5N09CMMC
1050	DBN10C	DB2N10C	DB3N10CC	DB4N10CMC	DB5N10CMMC
1200	DBN12C	DB2N12C	DB3N12CC	DB4N12CMC	DB5N12CMMC
1350	DBN13C	DB2N13C	DB3N13CC	DB4N13CMC	DB5N13CMMC
1500	DBN15C	DB2N15C	DB3N15CC	DB4N15CMC	DB5N15CMMC

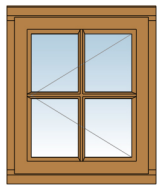
NOTE: All glazed frames now include low-E 24mm glazing. Frames 1500mm high or above, include low-E toughened glass. Window sizes shown are nominal and are approx 5mm less than the size shown to allow for building in. All illustrations above tables show exterior views.



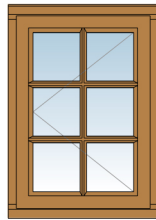
Fire Escape Windows will be fitted with Fire Escape Hinges.

GEORGIAN WINDOW BAR OPTIONS

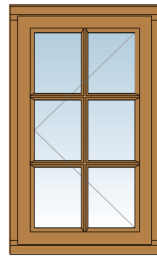
The following examples show the number of vertical and horizontal bars in the respective window heights and widths for Georgian Bar windows.
(Please note: illustrations not to scale with the rest of this section).



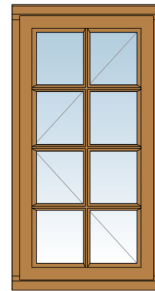
750mm high
1 horizontal
bar



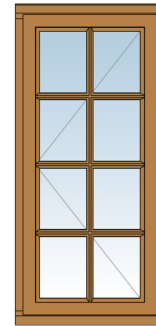
900mm high
2 horizontal
bars



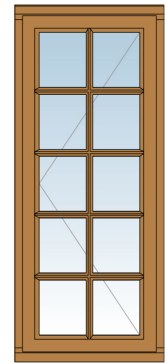
1050mm high
2 horizontal
bars



1200mm high
3 horizontal
bars



1350mm high
3 horizontal
bars

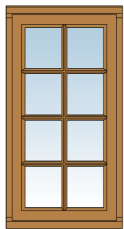


1500mm high
4 horizontal
bars

STAIN AND PAINT FINISHING OPTIONS

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

Standard Stain Finishes



Oak



Teak



Honduras



Walnut

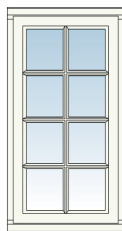


Rosewood

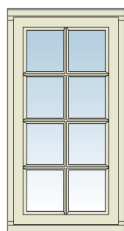
Standard Paint Finishes



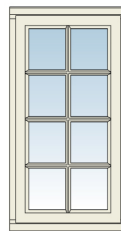
Copper Brown
RAL 8004



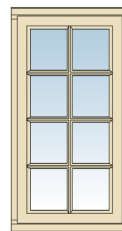
Pure White
RAL 9010



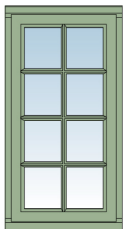
Gardenia
RAL 1013



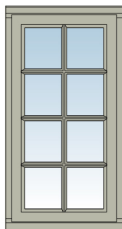
Country Cream
RAL 9001



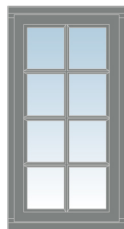
Buttermilk
RAL 1015



Pale Green
RAL 6021



Pebble Grey
RAL 7032



Dusty Grey
RAL 7037



Slate Grey
RAL 7015



Pastel Blue
RAL 5024



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.

NOTE: All Howarth paint/stain finishes are silk and not high gloss. Colours shown are for guidance only and due to printing processes may not be accurate.



42 COLONIAL



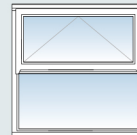
488



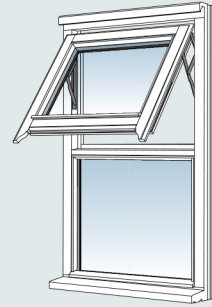
630



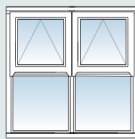
915



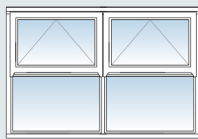
1200



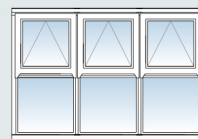
HEIGHT	CODE	CODE	CODE	CODE
750	CLN07T	CL107T	CL2N07T	CL207T
900	CLN09T	CL109T	CL2N09T	CL209T
1050	CLN10T	CL110T	CL2N10T	CL210T
1200	CLN12T	CL112T	CL2N12T	CL212T
1350	CLN13T	CL113T	CL2N13T	CL213T
1500	CLN15T	CL115T	CL2N15T	CL215T
1650	CLN16T	CL116T	CL2N16T	CL216T



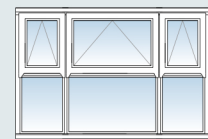
1200



1770



1770

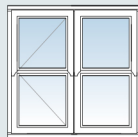


1770

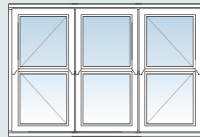
HEIGHT	CODE	CODE	CODE	CODE
750	CL207TT	CL307TT	CL307TTT	CL307VVV
900	CL209TT	CL309TT	CL309TTT	CL309VVV
1050	CL210TT	CL310TT	CL310TTT	CL310VVV
1200	CL212TT	CL312TT	CL312TTT	CL312VVV
1350	CL213TT	CL313TT	CL313TTT	CL313VVV
1500	CL215TT	CL315TT	CL315TTT	CL315VVV
1650	CL216TT	CL316TT	CL316TTT	CL316VVV



630



1200



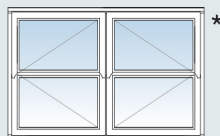
1770

HEIGHT	CODE	CODE	CODE
900	ECL109C	ECL209CF	ECL309CFC
1050	ECL110C	ECL210CF	ECL310CFC
1200	ECL112C	ECL212CF	ECL312CFC
1350	ECL113C	ECL213CF	ECL313CFC

Colonial Side Hung
'Lookalike'
Escape Window



915



1770

HEIGHT	CODE	CODE
900	ECL2N09C	ECL309CC
1050	ECL2N10C	ECL310CC
1200	ECL2N12C	ECL312CC
1350	ECL2N13C	ECL313CC

NOTE: The frames marked with an asterisk must be hung on special heavy duty reflex hinges to support the weight of the sashes. However, the opening of the sashes when fitted with these hinges still meet fire regulations.

Colonial
Narrow Module
'Lookalike'
Escape Window

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 less than the size shown to allow for building in. All illustrations above tables show exterior views.

Fire Escape Windows will be fitted with Fire Escape Hinges.

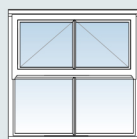
43 COLONIAL COTTAGE



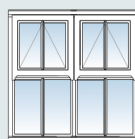
630



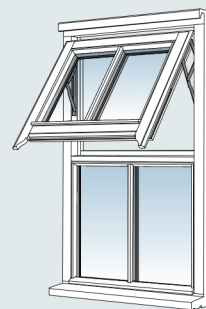
915



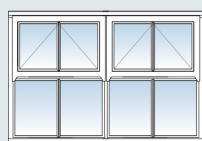
1200



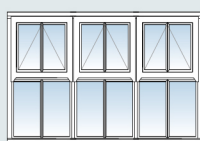
1200



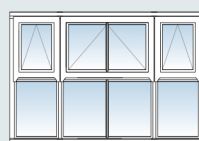
HEIGHT	CODE	CODE	CODE	CODE
750	CLC107T	CLC2N07T	CLC207T	CLC207TT
900	CLC109T	CLC2N09T	CLC209T	CLC209TT
1050	CLC110T	CLC2N10T	CLC210T	CLC210TT
1200	CLC112T	CLC2N12T	CLC212T	CLC212TT
1350	CLC113T	CLC2N13T	CLC213T	CLC213TT
1500	CLC115T	CLC2N15T	CLC215T	CLC215TT
1650	CLC116T	CLC2N16T	CLC216T	CLC216TT



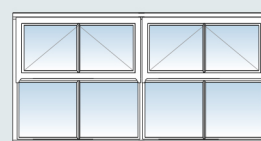
1770



1770



1770



2340

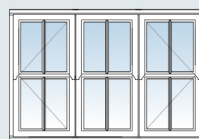
HEIGHT	CODE	CODE	CODE	CODE
750	CLC307TT	CLC307TTT	CLC307VWV	CLC407TT
900	CLC309TT	CLC309TTT	CLC309VWV	CLC409TT
1050	CLC310TT	CLC310TTT	CLC310VWV	CLC410TT
1200	CLC312TT	CLC312TTT	CLC312VWV	CLC412TT
1350	CLC313TT	CLC313TTT	CLC313VWV	CLC413TT
1500	CLC315TT	CLC315TTT	CLC315VWV	CLC415TT
1650	CLC316TT	CLC316TTT	CLC316VWV	CLC416TT



630



1200



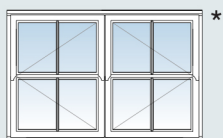
1770

Colonial Cottage
Side Hung
'Lookalike'
Escape Window

HEIGHT	CODE	CODE	CODE
900	ECLC109C	ECLC209CF	ECLC309CFC
1050	ECLC110C	ECLC210CF	ECLC310CFC
1200	ECLC112C	ECLC212CF	ECLC312CFC
1350	ECLC113C	ECLC213CF	ECLC313CFC



915



1770

HEIGHT	CODE	CODE
900	ECLC2N09C	ECLC309CC
1050	ECLC2N10C	ECLC310CC
1200	ECLC2N12C	ECLC312CC
1350	ECLC2N13C	ECLC313CC

NOTE: The frames marked with an asterisk must be hung on special heavy duty reflex hinges to support the weight of the sashes. However, the opening of the sashes when fitted with these hinges still meet fire regulations.

Colonial Cottage
Narrow Module
'Lookalike'
Escape Window

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 less than the size shown to allow for building in. All illustrations above tables show exterior views.

Fire Escape Windows will be fitted with Fire Escape Hinges.

44 COLONIAL MODERN



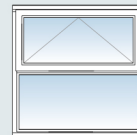
488



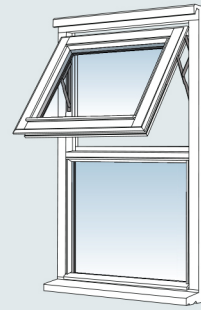
630



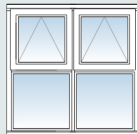
915



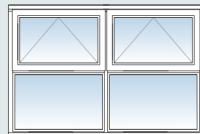
1200



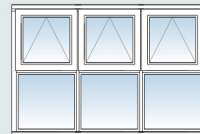
HEIGHT	CODE	CODE	CODE	CODE
750	CLMN07T	CLM107T	CLM2N07T	CLM207T
900	CLMN09T	CLM109T	CLM2N09T	CLM209T
1050	CLMN10T	CLM110T	CLM2N10T	CLM210T
1200	CLMN12T	CLM112T	CLM2N12T	CLM212T
1350	CLMN13T	CLM113T	CLM2N13T	CLM213T
1500	CLMN15T	CLM115T	CLM2N15T	CLM215T
1650	CLMN16T	CLM116T	CLM2N16T	CLM216T



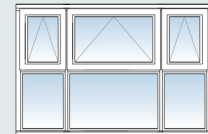
1200



1770



1770



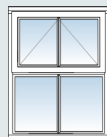
1770

HEIGHT	CODE	CODE	CODE	CODE
750	CLM207TT	CLM307TT	CLM307TTT	CLM307VVV
900	CLM209TT	CLM309TT	CLM309TTT	CLM309VVV
1050	CLM210TT	CLM310TT	CLM310TTT	CLM310VVV
1200	CLM212TT	CLM312TT	CLM312TTT	CLM312VVV
1350	CLM213TT	CLM313TT	CLM313TTT	CLM313VVV
1500	CLM215TT	CLM315TT	CLM315TTT	CLM315VVV
1650	CLM216TT	CLM316TT	CLM316TTT	CLM316VVV

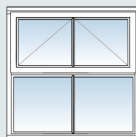
45 COLONIAL MODERN COTTAGE



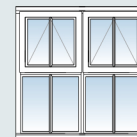
630



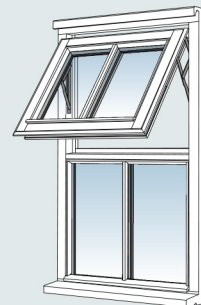
915



1200



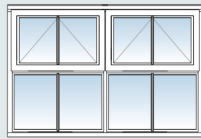
1200



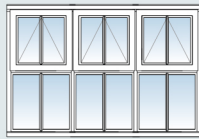
HEIGHT	CODE	CODE	CODE	CODE
750	CLMC107T	CLMC2N07T	CLMC207T	CLMC207TT
900	CLMC109T	CLMC2N09T	CLMC209T	CLMC209TT
1050	CLMC110T	CLMC2N10T	CLMC210T	CLMC210TT
1200	CLMC112T	CLMC2N12T	CLMC212T	CLMC212TT
1350	CLMC113T	CLMC2N13T	CLMC213T	CLMC213TT
1500	CLMC115T	CLMC2N15T	CLMC215T	CLMC215TT
1650	CLMC116T	CLMC2N16T	CLMC216T	CLMC216TT

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 less than the size shown to allow for building in.
All illustrations above tables show exterior views.

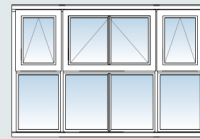
COLONIAL MODERN COTTAGE (CONTINUED)



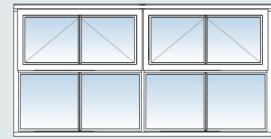
1770



1770



1770



2340

HEIGHT	CODE	CODE	CODE	CODE
750	CLMC307TT	CLMC307TTT	CLMC307VVV	CLMC407TT
900	CLMC309TT	CLMC309TTT	CLMC309VVV	CLMC409TT
1050	CLMC310TT	CLMC310TTT	CLMC310VVV	CLMC410TT
1200	CLMC312TT	CLMC312TTT	CLMC312VVV	CLMC412TT
1350	CLMC313TT	CLMC313TTT	CLMC313VVV	CLMC413TT
1500	CLMC315TT	CLMC315TTT	CLMC315VVV	CLMC415TT
1650	CLMC316TT	CLMC316TTT	CLMC316VVV	CLMC416TT

46 REGENCY



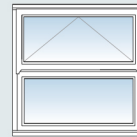
488



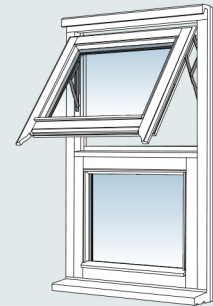
630



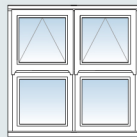
915



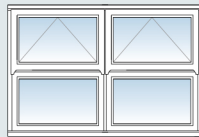
1200



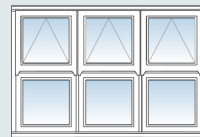
HEIGHT	CODE	CODE	CODE	CODE
750	RN07T	R107T	R2N07T	R207T
900	RN09T	R109T	R2N09T	R209T
1050	RN10T	R110T	R2N10T	R210T
1200	RN12T	R112T	R2N12T	R212T
1350	RN13T	R113T	R2N13T	R213T
1500	RN15T	R115T	R2N15T	R215T
1650	RN16T	R116T	R2N16T	R216T



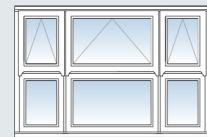
1200



1770



1770



1770

HEIGHT	CODE	CODE	CODE	CODE
750	R207TT	R307TT	R307TTT	R307VVV
900	R209TT	R309TT	R309TTT	R309VVV
1050	R210TT	R310TT	R310TTT	R310VVV
1200	R212TT	R312TT	R312TTT	R312VVV
1350	R213TT	R313TT	R313TTT	R313VVV
1500	R215TT	R315TT	R315TTT	R315VVV
1650	R216TT	R316TT	R316TTT	R316VVV

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 less than the size shown to allow for building in.

All illustrations above tables show exterior views.

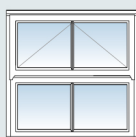
47 REGENCY COTTAGE



630



915



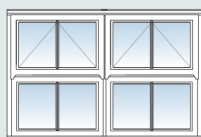
1200



1200



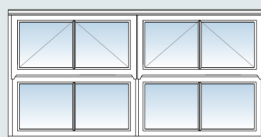
HEIGHT	CODE	CODE	CODE	CODE
750	RC107T	RC2N07T	RC207T	RC207TT
900	RC109T	RC2N09T	RC209T	RC209TT
1050	RC110T	RC2N10T	RC210T	RC210TT
1200	RC112T	RC2N12T	RC212T	RC212TT
1350	RC113T	RC2N13T	RC213T	RC213TT
1500	RC115T	RC2N15T	RC215T	RC215TT
1650	RC116T	RC2N16T	RC216T	RC216TT



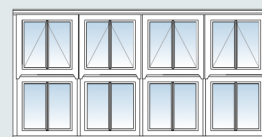
1770



1770



2340



2340

HEIGHT	CODE	CODE	CODE	CODE
750	RC307TT	RC307VVV	RC407TT	RC407TTTT
900	RC309TT	RC309VVV	RC409TT	RC409TTTT
1050	RC310TT	RC310VVV	RC410TT	RC410TTTT
1200	RC312TT	RC312VVV	RC412TT	RC412TTTT
1350	RC313TT	RC313VVV	RC413TT	RC413TTTT
1500	RC315TT	RC315VVV	RC415TT	RC415TTTT
1650	RC316TT	RC316VVV	RC416TT	RC416TTTT



(Left) Grange Lane, Utterby, Lincolnshire.
Photograph courtesy of
Howarth Timber (Grimsby) Ltd.

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 less than the size shown to allow for building in.
All illustrations above tables show exterior views.



The Stormproof Regency Cottage window range features modern catches for extra security.

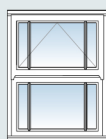
Face-fixed handles are available in White or Black as standard or a choice of other colours as an optional extra.



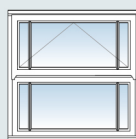
48 REGENCY MARGINAL BAR



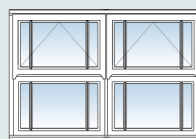
630



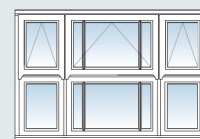
915



1200



1770

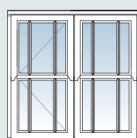


1770

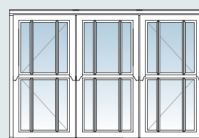
HEIGHT	CODE	CODE	CODE	CODE	CODE
750	RMB107T	RMB2N07T	RMB207T	RMB307TT	RMB307VVV
900	RMB109T	RMB2N09T	RMB209T	RMB309TT	RMB309VVV
1050	RMB110T	RMB2N10T	RMB210T	RMB310TT	RMB310VVV
1200	RMB112T	RMB2N12T	RMB212T	RMB312TT	RMB312VVV
1350	RMB113T	RMB2N13T	RMB213T	RMB313TT	RMB313VVV
1500	RMB115T	RMB2N15T	RMB215T	RMB315TT	RMB315VVV
1650	RMB116T	RMB2N16T	RMB216T	RMB316TT	RMB316VVV



630



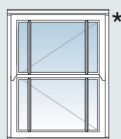
1200



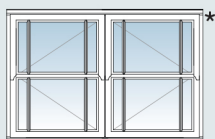
1770

Regency Marginal Bar
Side Hung
'Lookalike'
Escape Window

HEIGHT	CODE	CODE	CODE
900	ERMB109C	ERMB209CF	ERMB309CFC
1050	ERMB110C	ERMB210CF	ERMB310CFC
1200	ERMB112C	ERMB212CF	ERMB312CFC
1350	ERMB113C	ERMB213CF	ERMB313CFC



915



1770

HEIGHT	CODE	CODE
900	ERMB2N09C	ERMB309CC
1050	ERMB2N10C	ERMB310CC
1200	ERMB2N12C	ERMB312CC
1350	ERMB2N13C	ERMB313CC

NOTE: The frames marked with an asterisk must be hung on special heavy duty reflex hinges to support the weight of the sashes. However, the opening of the sashes when fitted with these hinges still meet fire regulations.

Regency Marginal Bar
Narrow Module
'Lookalike'
Escape Window

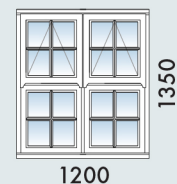
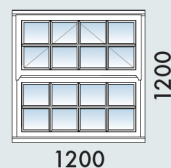
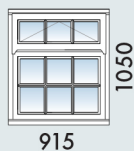
(Right) Regency All Bar timber windows installed by Linden Homes at the Saint Nicholasgate development, Beverley, East Yorkshire. Further details on top of opposite page.



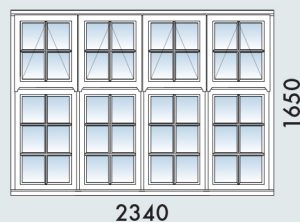
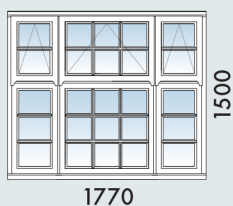
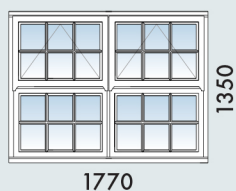
NOTE: All glazed frames now include low-E 24mm glazing. Frames 1500mm high or above, include low-E toughened glass. Window sizes shown are nominal and are approx 5mm less than the size shown to allow for building in. All illustrations above tables show exterior views.

Fire Escape Windows will be fitted with Fire Escape Hinges.

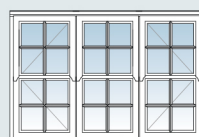
49 REGENCY ALL BAR



HEIGHT	CODE	CODE	CODE	CODE	CODE
750	RDBN07T	RDB107T	RDB2N07T	RDB207T	RDB207TT
900	RDBN09T	RDB109T	RDB2N09T	RDB209T	RDB209TT
1050	RDBN10T	RDB110T	RDB2N10T	RDB210T	RDB210TT
1200	RDBN12T	RDB112T	RDB2N12T	RDB212T	RDB212TT
1350	RDBN13T	RDB113T	RDB2N13T	RDB213T	RDB213TT
1500	RDBN15T	RDB115T	RDB2N15T	RDB215T	RDB215TT
1650	RDBN16T	RDB116T	RDB2N16T	RDB216T	RDB216TT

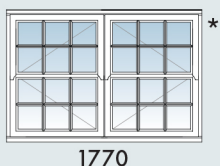


HEIGHT	CODE	CODE	CODE
750	RDB307TT	RDB307VVV	RDB407TTTT
900	RDB309TT	RDB309VVV	RDB409TTTT
1050	RDB310TT	RDB310VVV	RDB410TTTT
1200	RDB312TT	RDB312VVV	RDB412TTTT
1350	RDB313TT	RDB313VVV	RDB413TTTT
1500	RDB315TT	RDB315VVV	RDB415TTTT
1650	RDB316TT	RDB316VVV	RDB416TTTT



HEIGHT	CODE	CODE	CODE
900	ERDB109C	ERDB209CF	ERDB309CFC
1050	ERDB110C	ERDB210CF	ERDB310CFC
1200	ERDB112C	ERDB212CF	ERDB312CFC
1350	ERDB113C	ERDB213CF	ERDB313CFC

Regency All Bar
Side Hung
'Lookalike'
Escape Window



HEIGHT	CODE	CODE
900	ERDB2N09C	ERDB309CC
1050	ERDB2N10C	ERDB310CC
1200	ERDB2N12C	ERDB312CC
1350	ERDB2N13C	ERDB313CC

NOTE: The frames marked with an asterisk must be hung on special heavy duty reflex hinges to support the weight of the sashes. However, the opening of the sashes when fitted with these hinges still meet fire regulations.

Regency All Bar
Narrow Module
'Lookalike'
Escape Window

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 less than the size shown to allow for building in. All illustrations above tables show exterior views.

Fire Escape Windows will be fitted with Fire Escape Hinges.

50 SQUARE BAYS with 69mm x 69mm POSTS

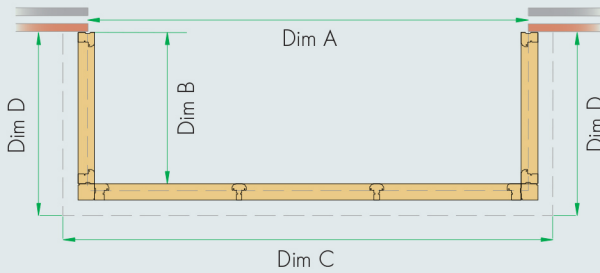
Standard Module

CODE	DIMENSION			
	A	B	C	D
SQ1	686	626	890	758
SQ2	1255	626	1459	758
SQ3	1824	626	2028	758
SQ4	2393	626	2597	758
SQ5	2955	626	3159	758

Narrow Module

CODE	DIMENSION			
	A	B	C	D
SQ1N	544	484	748	616
SQ2N	971	484	1175	616
SQ3N	1398	484	1602	616
SQ4N	1825	484	2029	616
SQ5N	2249	484	2453	616

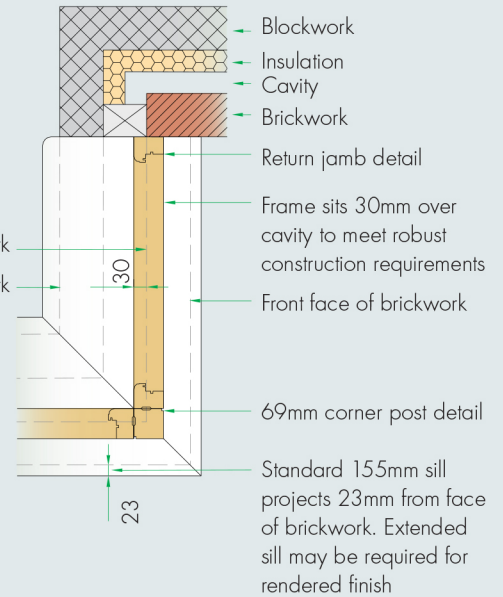
Dimensions



NOTE: Dashed line represents brickwork

Back face of brickwork

Blockwork



Blockwork

Insulation

Cavity

Brickwork

Return jamb detail

Frame sits 30mm over

cavity to meet robust

construction requirements

Front face of brickwork

69mm corner post detail

Standard 155mm sill

projects 23mm from face

of brickwork. Extended

sill may be required for

rendered finish

51 SQUARE BAYS with 96mm x 96mm POSTS

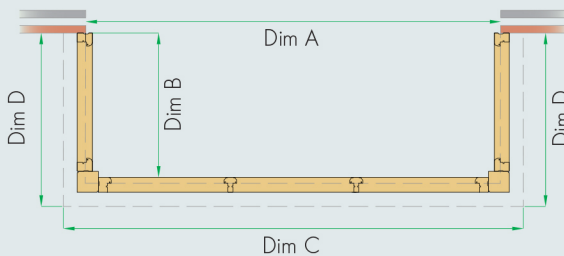
Standard Module

CODE	DIMENSION			
	A	B	C	D
SQ1-100	740	653	944	785
SQ2-100	1309	653	1513	785
SQ3-100	1878	653	2082	785
SQ4-100	2447	653	2651	785
SQ5-100	3009	653	3213	785

Narrow Module

CODE	DIMENSION			
	A	B	C	D
SQ1N-100	598	511	802	643
SQ2N-100	1025	511	1229	643
SQ3N-100	1452	511	1656	643
SQ4N-100	1879	511	2083	643
SQ5N-100	2303	511	2507	643

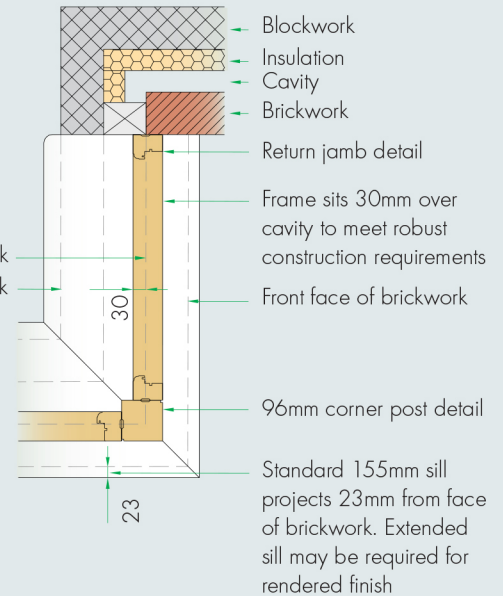
Dimensions



NOTE: Dashed line represents brickwork

Back face of brickwork

Blockwork



Blockwork

Insulation

Cavity

Brickwork

Return jamb detail

Frame sits 30mm over

cavity to meet robust

construction requirements

Front face of brickwork

96mm corner post detail

Standard 155mm sill

projects 23mm from face

of brickwork. Extended

sill may be required for

rendered finish

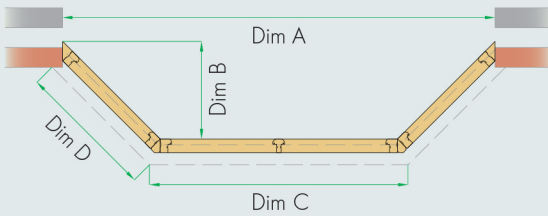
NOTE: To comply with manual handling regulations, pre-glazed bays or combinations will be supplied in sections for final site assembly.

52 45° SPLAYED BAYS

45° Standard Module

CODE	DIMENSION			
	A	B	C	D
SP1/45	1609	491	735	695
SP2/45	2178	491	1304	695
SP3/45	2747	491	1873	695
SP4/45	3316	491	2442	695
SP5/45	3878	491	3004	695

Dimensions

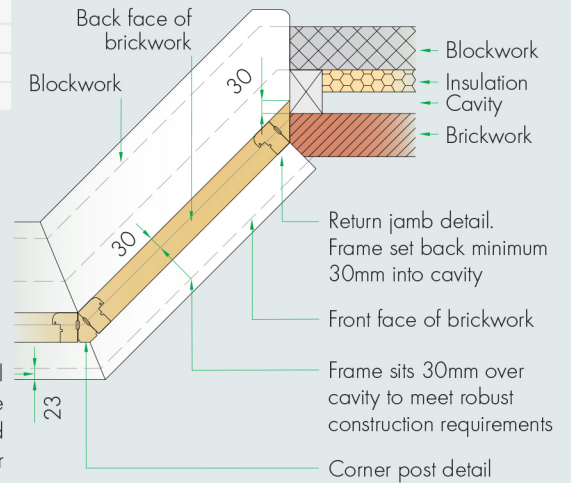


NOTE: Dashed line represents brickwork

45° Narrow Module

CODE	DIMENSION			
	A	B	C	D
SP1N/45	1266	391	593	553
SP2N/45	1693	391	1020	553
SP3N/45	2120	391	1447	553
SP4N/45	2547	391	1874	553
SP5N/45	2971	391	2298	553

Standard 155mm sill projects 23mm from face of brickwork. Extended sill may be required for rendered finish

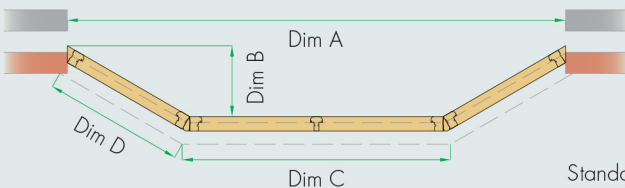


53 30° SPLAYED BAYS

30° Standard Module

CODE	DIMENSION			
	A	B	C	D
SP1/30	1779	333	697	666
SP2/30	2348	333	1266	666
SP3/30	2917	333	1835	666
SP4/30	3486	333	2404	666
SP5/30	4048	333	2966	666

Dimensions

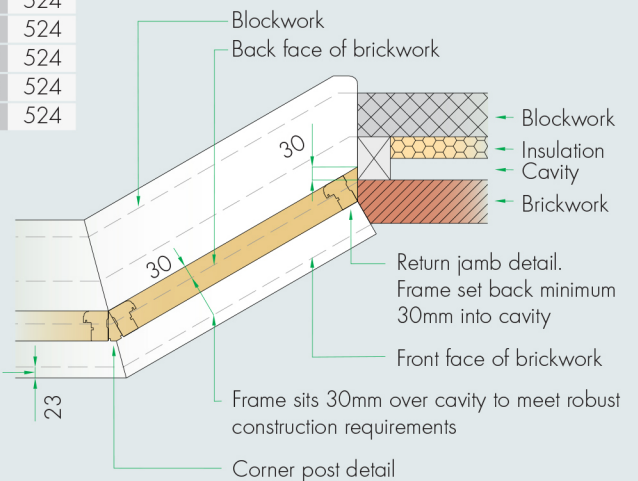


NOTE: Dashed line represents brickwork

30° Narrow Module

CODE	DIMENSION			
	A	B	C	D
SP1N/30	1391	262	555	524
SP2N/30	1818	262	982	524
SP3N/30	2245	262	1409	524
SP4N/30	2672	262	1836	524
SP5N/30	3096	262	2260	524

Standard 155mm sill projects 23mm from face of brickwork. Extended sill may be required for rendered finish



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

54 60° SPLAYED BAYS

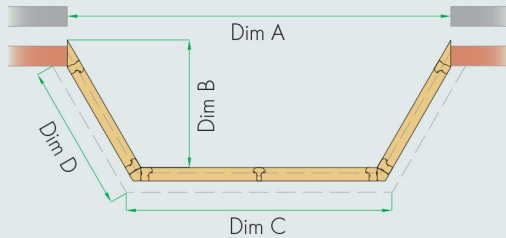
60° Standard Module

CODE	DIMENSION			
	A	B	C	D
SP1/60	1372	646	778	739
SP2/60	1941	646	1347	739
SP3/60	2510	646	1916	739
SP4/60	3079	646	2485	739
SP5/60	3641	646	3047	739

60° Narrow Module

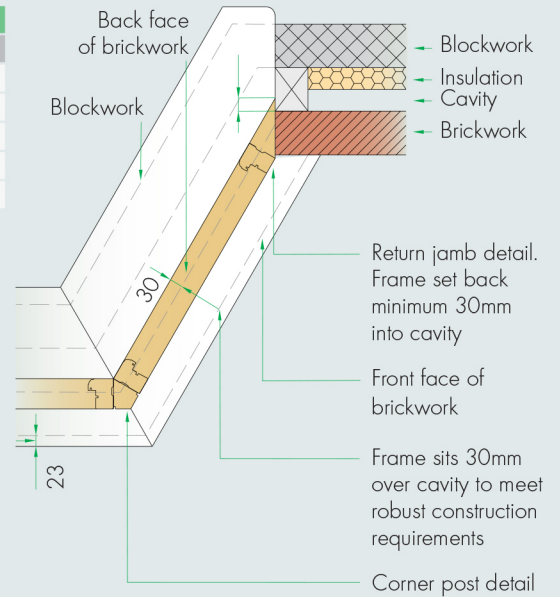
CODE	DIMENSION			
	A	B	C	D
SP1N/60	1088	523	636	597
SP2N/60	1515	523	1063	597
SP3N/60	1942	523	1490	597
SP4N/60	2369	523	1917	597
SP5N/60	2793	523	2341	597

Dimensions



NOTE: Dashed line represents brickwork

Standard 155mm sill projects 23mm from face of brickwork. Extended sill may be required for rendered finish



55 ORIEL BAYS

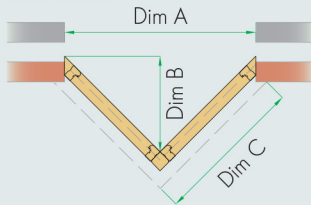
Standard Module

CODE	DIMENSION		
	A	B	C
Standard	983	491	772

Narrow Module

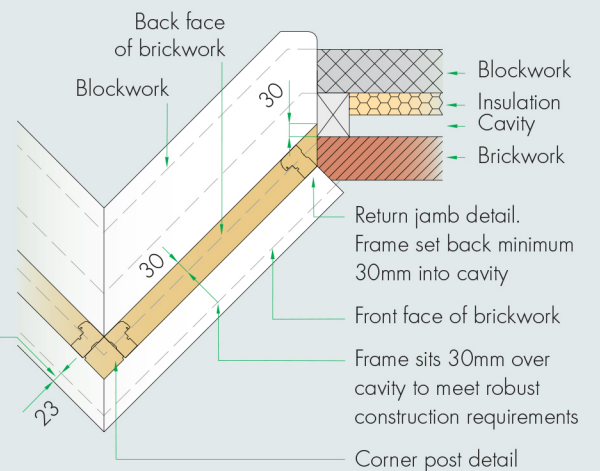
CODE	DIMENSION		
	A	B	C
Narrow	782	391	630

Dimensions



NOTE: Dashed line represents brickwork

Standard 155mm sill projects 23mm from face of brickwork. Extended sill may be required for rendered finish



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

56 DEEP CIRCULAR BAYS

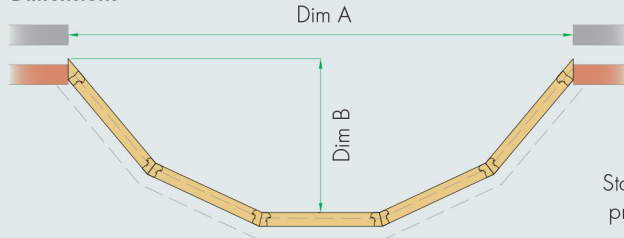
Standard Module

CODE	DIMENSION	
	A	B
CR4D	2216	533
CR5D	2565	782
CR6D	2794	1151
CR7D	2890	1413

Narrow Module

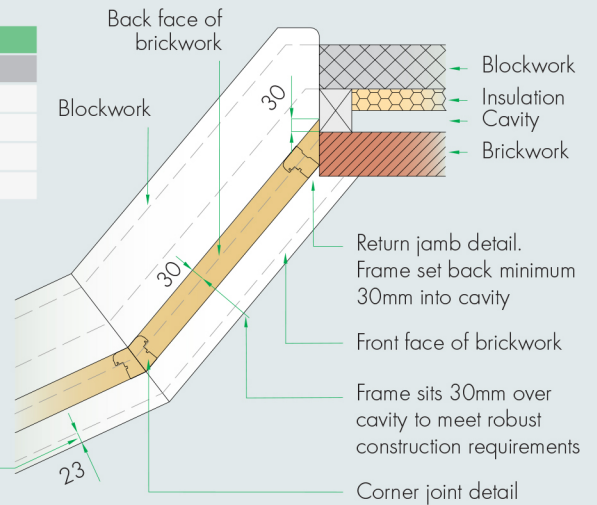
CODE	DIMENSION	
	A	B
CR4DN	1713	416
CR5DN	1984	614
CR6DN	2160	907
CR7DN	2234	1107

Dimensions



NOTE: Dashed line represents brickwork

Standard 155mm sill projects 23mm from face of brickwork. Extended sill may be required for rendered finish



57 SHALLOW CIRCULAR BAYS

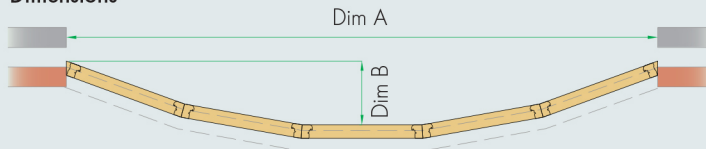
Standard Module

CODE	DIMENSION	
	A	B
CR3S	1848	137
CR4S	2430	273
CR5S	2983	407
CR6S	3500	605

Narrow Module

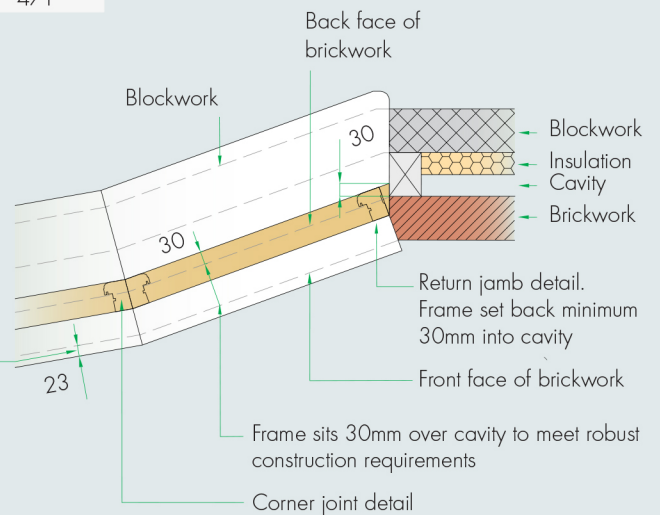
CODE	DIMENSION	
	A	B
CR3SN	1429	106
CR4SN	1879	212
CR5SN	2306	316
CR6SN	2706	471

Dimensions



NOTE: Dashed line represents brickwork

Standard 155mm sill projects 23mm from face of brickwork. Extended sill may be required for rendered finish



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

1. Night ventilators

All windows between 488mm and 914mm wide include 4600mm² equivalent area of ventilation. All windows 915mm wide and over include 9200mm² equivalent area of ventilation. Please specify only 4600mm² equivalent area of ventilation, or no ventilation.

2. Reflex hinges

Frames come with reflex hinges as standard to opening sashes.

- Side hung windows over 1350mm high require heavy duty reflex hinges.
- We do not manufacture Side Hung sashes over 1500mm high.
- Heavy duty reflex hinges may be required on Single Sash Side Hung windows over 630mm wide dependent upon the height of the sash.
- We do not manufacture Side Hung Single Sash windows over 915mm wide.
- Heavy duty reflex hinges are required on the following Regency, Colonial and full height Top Hung window sizes:

REGENCY AND COLONIAL	
915 x 1350	1200 x 1350
915 x 1500	1200 x 1500
915 x 1650	1200 x 1650

FULL HEIGHT TOP HUNG		
488 x 1050	915 x 1050	1200 x 750
488 x 1200	915 x 1200	1200 x 900
630 x 1050		1200 x 1050
630 x 1200		1200 x 1200

All measurements in millimetres

Fire escape reflex hinges are available;

Standard reflex hinges are not sold as easy-clean hinges. Please contact Sales Office for information on easy-clean window options on 01469 530577.

3. Sills

The standard sill width is 155mm 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 69mm flush sills and 105mm stub sills (at no extra cost), or 181mm and 205mm extended sills (at extra cost).

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.**

4. 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.

5. Combination door and window frames are available



6. Factory fitted Swept Head (shown above)

For information on availability of Swept Heads please contact the Sales Office on 01469 530577.

7. Additional sash are available

8. Additional vent

Additional shallow or deep vents are available.

9. Repair kits for fully finished windows

Includes paint or stain, brush, sandpaper, tube of filler and instructions. Will cover 0.5m².

10. Cavity closers in loose lengths are available

11. 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 fitted with shootbolt or espagnolette locking systems must be fitted with reflex hinges.

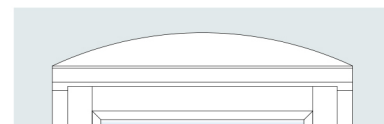
Cam adjustments on espagnolette and shootbolt locking. Both locking mechanisms are user adjustable by the purchaser to allow for slight movement which can occur naturally within timber profiles, or any alignment change which may have occurred to the sash during the transport or installation of the frame.

12. Restrictor stays

Face fixing restrictor stays in white or brown colours are available. Reflex hinges with built-in restrictors are also available.

13. Secured by Design

Stormproof casement 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.



14. Cambered heads (shown above)

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

15. 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.

16. Window surrounds (WSA)

Available in 82mm and 98mm widths for rendering or timber cladding and 135mm width for tile hanging. Please specify whether window surrounds need to be fitted to window jambs only, or the jambs and head.

17. Shrink wrapping

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

18. 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.

19. 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.