

CONCRETE FRAMED CF/L LIGHT DUTY

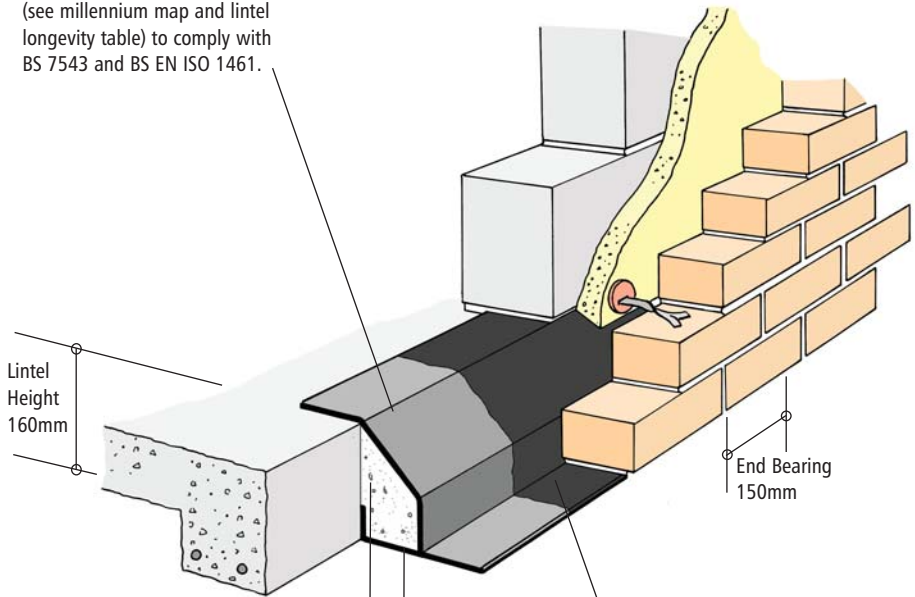
Lintels are manufactured from minimum 4mm thick structural steel plate with a minimum yield strength of 275N/mm².

All lintels are post galvanised to a minimum zinc thickness dictated by building usage and geographical corrosivity ratings (see millennium map and lintel longevity table) to comply with BS 7543 and BS EN ISO 1461.

DURA GALV 70

DURA GALV 100

DURA GALV 140



Factory fitted profiled polystyrene insulation. CFC Free. For Thermal performance requirements to part L1&L2 building regulations.

Integral steel compression flange for flush finish to soffit.

DUPLEX COATING

Duplex paint system over post galvanised lintel, dictated by building usage and geographical corrosivity ratings (see millennium map and lintel longevity table).

PRODUCTS AND INFORMATION CAN BE AMENDED WITHOUT PRIOR CONSENT TO MAINTAIN THE COMPANY POLICY OF CONTINUED IMPROVEMENT

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SECTION 3 PAGE 3

CONCRETE FRAMED CF/L LIGHT DUTY

GENERAL TECHNICAL DETAIL, COMPOSITION AND MANUFACTURE

GENERAL

Introduction. The SUPERLINTEL CF/L range of lintels, for concrete framed applications, have a number of outstanding features which contribute to performance and durability characteristics which exceed BSEN 845-2:2003 recommendations.

These Features include:-

- 4mm thick structural steel plate used throughout for rigidity, long life durability and dimensional consistency.
- Optimum protection against corrosion; Lintels are hot-dip galvanised after manufacture.
- End bearings of 150mm as standard for high structural stability.

Non-standard end bearings can be supplied to order.

COMPOSITION AND MANUFACTURE

Lintels are manufactured from minimum 4mm thick steel structural plate with a minimum yield strength of 275N/mm².

All lintels are Hot Dip Galvanised after manufacture, tested in compliance with BS EN ISO 1461 for zinc coatings of steel through the controlled inhouse galvanising "DURAGALV" process. Coating thicknesses vary in accordance with the requirements of BS 7543 and local corrosion categories levels.

For "DURAGALV" coatings above 70 microns, I.E: Duragalv 100 and 140, additional controlled processes are employed to ensure the heavier coatings adhere to the "minimum 4mm" specially selected steel plate required to accept these levels of heavy coatings.

To achieve protection for all five corrosion category areas, a further "DUPLEX COATING" paint system is applied to lintels, after galvanising, in the most severe areas of corrosion levels.

LOADINGS, SECTIONAL DETAIL / PROPERTIES

PERFORMANCE

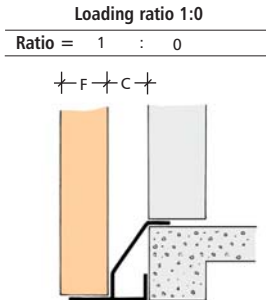
Mechanics. Safe working loads for the CF/L range of lintels are established by testing based upon the non-destructive test procedures for steel lintels as recommended in BSEN 845-2:2003

Each load is the **total** allowable equivalent uniformly distributed load (UDL) as described in BS 5977 : Pt.1 :

REQUIRED FOR SPECIFYING

F - Facing leaf width

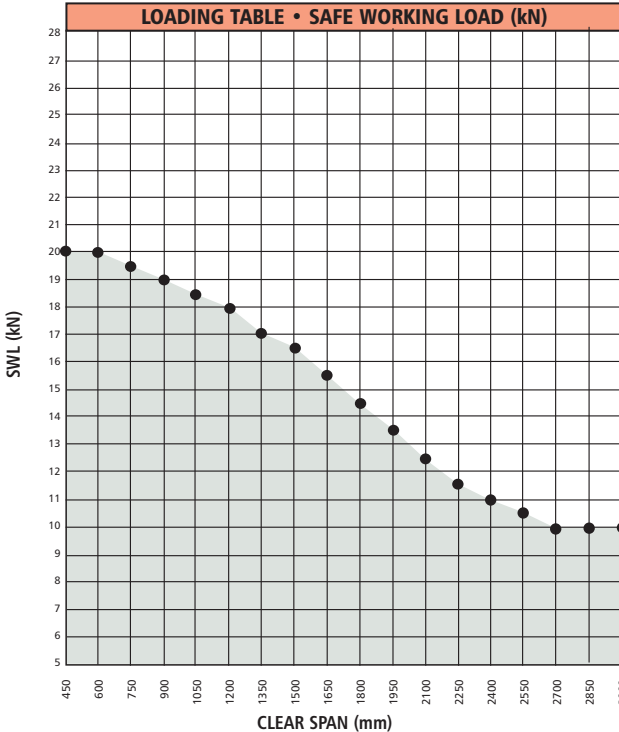
C - Cavity width



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CONCRETE FRAMED CF/L LIGHT DUTY

LOADING TABLES



SWL			
CLEAR SPAN	(min) END BEARING	OVERALL LENGTH	SWL (kN)
450	150	750	20
600	150	900	20
750	150	1050	19.5
900	150	1200	19
1050	150	1350	18.5
1200	150	1500	18
1350	150	1650	17
1500	150	1800	16.5
1650	150	1950	15.5
1800	150	2100	14.5
1950	150	2250	13.5
2100	150	2400	12.5
2250	150	2550	11.5
2400	150	2700	11
2550	150	2850	10.5
2700	150	3000	10
2850	150	3150	10
3000	150	3300	10

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SECTIONAL PROPERTIES

EXAMPLE OF SECTIONAL PROPERTIES			
SECTION REFERENCE	FACING LEAF WIDTH (F)	CAVITY WIDTH (C)	LINTEL WEIGHT/M kg
CF/L/102/50	102	50	13.0
CF/L/102/70	102	70	13.5
CF/L/102/85	102	85	14.0
CF/L/102/100	102	100	14.5

CONCRETE FRAMED CF/L LIGHT DUTY

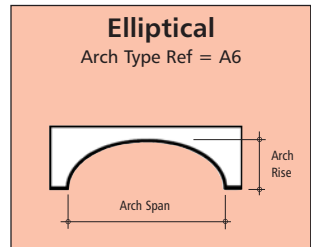
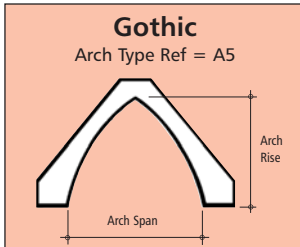
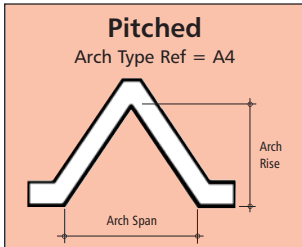
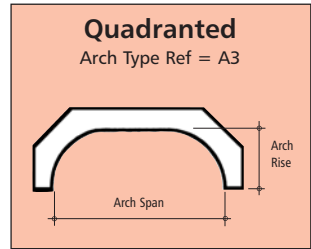
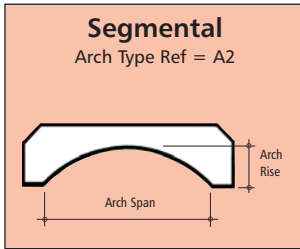
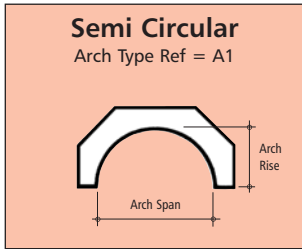
ARCHED LINTEL TYPES

Arched soffit Superlintels can be designed to suit any of the concrete framed lintel sections. there are 6 standard arch profiles shown, each providing full support to masonry arch shapes as drawn.

Steel flange thicknesses to lintel soffits are allowed for within a design to ensure continuity of brick coursing to outer leaf, in particular spring points at each end of lintel spans.

Where overall lintel height exceeds 450mm, webs are cropped to allow wall ties to be continued between both outer and inner leaf.

As with flat soffit Superlintels, the lintel section is dictated by wall construction, load and span. Arched forms may dictate minor changes to lintel section as shown.



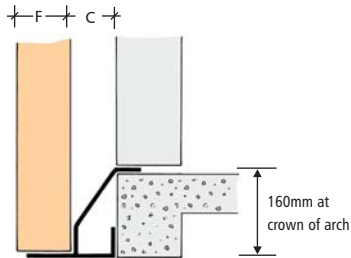
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LOADING RATIOS, SECTIONAL DETAILS OF ARCHES

REQUIRED FOR SPECIFYING ARCHES

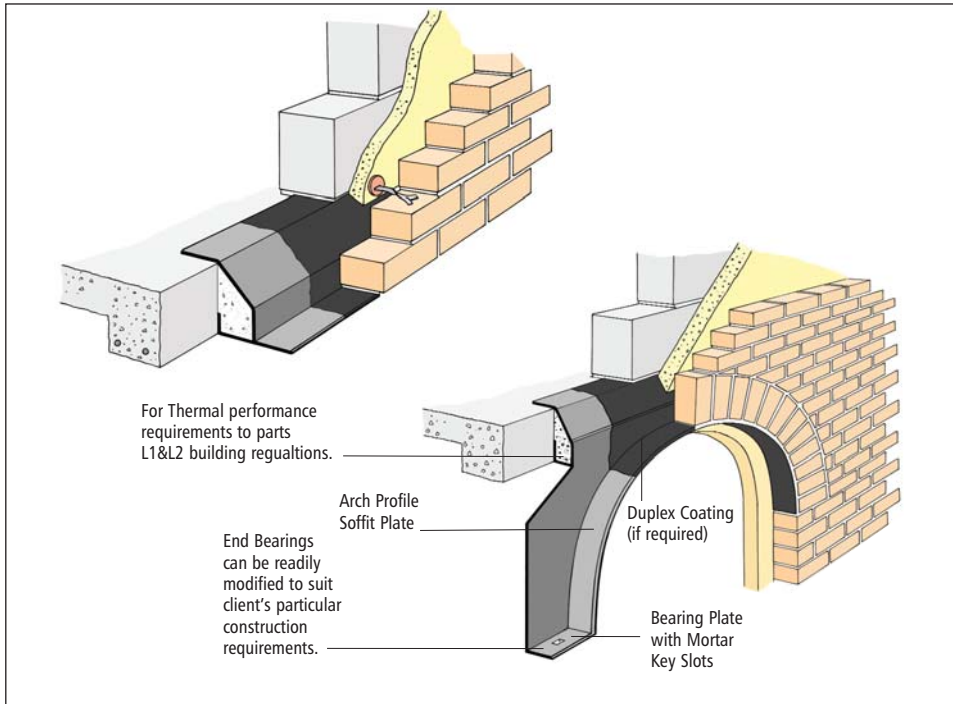
F - Facing leaf width

C - Cavity width



CONCRETE FRAMED CF/L LIGHT DUTY

TYPICAL INSTALLATION/CONSTRUCTION DETAILS



ACCESSORY SUFFIXES

To specify add the following suffixes to the progression specification code

CFC Concrete frame connection.

G Stepped outer flange (20 mm step unless stated).

JAF Moulded arch former.

JSF Superarch steel arch former.

M Phosphate etch finish to lintel soffit.

SS Stainless steel lintel

Note: Finish coating suffix code i.e.

DG140 (Duragalv 140) is not required when specifying stainless steel.

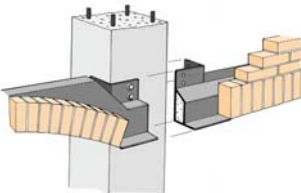
U Metal lathing plaster key.

CFC Accessory

Concrete frame connection

Illustration shows one of a large number of solutions where facework is required to pass across an inner column face without brick piers interrupting below lintel soffit (e.g. continual curtain walling).

Column connections can also be used to resist overturning moments where insufficient bearing resistance can be achieved by conventional build at ends of lintel.



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SECTION **3** PAGE **7**

CONCRETE FRAMED

CF/L LIGHT DUTY

FINISHES

How to use the Lintel Longevity Table

1. Locate your site on the Millennium map (E.g. Leeds - West Yorkshire)
2. Match the corrosion category square colour to the key (Leeds = 3 light blue)
3. From the left hand column clarify required Construction Type / Minimum life (High quality Refurbishment = 60 years)
4. Read along from 60 years to category 3 (Minimum coating to be specified to comply with standards = Duragalv 100)
5. At the end of the specifying code DG100 needs to be added.

Coating suffix specifying codes:

- Duragalv70 = DG70
- Duragalv100 = DG100
- Duragalv140 = DG140
- Duragalv140 + Duplex Coating = DG140DC

Fabricated mild steel lintel, Hot-Dip Galvanised after manufacture		= LINTEL LONGEVITY TABLE				
Millennium Map corrosion category 1/2/3/4/5, and the minimum coatings to be specified in those areas, to comply with BS 7543 and BS EN 845-2:2003.						
See Millennium Map for your site location or visit www.hdg.org.uk/map/index.htm		1	2	3	4	5
CONSTRUCTION TYPE / MIN LIFE Retail, Industrial and General Refurb. Minimum = 30 YEARS Life to Comply With BS 7543	DURA GALV 70	DURA GALV 70	DURA GALV 70	DURA GALV 70	DURA GALV 100	
CONSTRUCTION TYPE / MIN LIFE Health, Education, New Housing High Quality Refurb. Minimum = 60 YEARS Life to Comply With BS 7543	DURA GALV 70	DURA GALV 70	DURA GALV 100	DURA GALV 140	DURA GALV 140 DUPLEX COATING	
CONSTRUCTION TYPE / MIN LIFE Civic and Other High Quality Buildings. Minimum = 120 YEARS Life to Comply With BS7543	DURA GALV 70	DURA GALV 140	DURA GALV 140 DUPLEX COATING	DURA GALV 140 DUPLEX COATING	DURA GALV 140 DUPLEX COATING	

Any lintel profile can be created by our in-house design team with spans ranging from 600mm and rises to suit. Contact our advice team on techadvice@jonesofoswestry.com for online support and free design service.

HOW TO SPECIFY

PROGRESSIONAL EXAMPLE FOR SPECIFYING									
Ref DESCRIPTION	MAIN PRODUCT CODE	LOADING	FACING LEAF WIDTH (F)	CAVITY WIDTH (C)	SPAN	ARCH TYPE	ARCH RISE	ACCESSORY SUFFIX	FINISHED COATING
DETAIL	(CONCRETE FRAMED)	(LIGHT)	(102mm)	(75mm)	(2100mm)	(A2 = SEGMENTAL)	(450mm)	(METAL LATHING KEY)	(SEE LONGEVITY TABLE)
PRODUCT Ref	CF	L	102	75	2100	A2	450	U	DG100
THE ABOVE EQUALS FULL SPECIFYING CODE OF = CF/L/102/75/2100/A2/450/U/DG100									

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