



CASWELL FIRESAFE® Fire Resisting Duct Systems Product Data Sheets

CASWELL FIRESAFE® fire resisting ductwork is available in a variety of construction arrangements and performances.

To understand the product reference, the nomenclature is described here: -

Product Reference Nomenclature

CF / BS / Stability & Integrity / Insulation / Material / Construction Type / Shape

- CF – CASWELL FIRESAFE®
- Spec – BS Tested and Assessed to BS476-24 (1987) ISO 6944-1 (1985)
- Stability and Integrity – Performance Criteria (stated in hours)
- Insulation – Performance Criteria (00/01/02 – see table below)
- Material – Galvanised steel (GS) / Stainless steel (SS) / Mild steel (MS)
- Construction Type – Type reference (01/02 – see table below)
- Shape – Rectangular (R) or Circular (C)

Insulation Performance	Description
00	Nil fire resistance insulation performance
01	25mm Rockwool 160kg/m ³ which provides 30 minutes' fire resistance
02	40mm Rockwool 160kg/m ³ which provides 60 minutes' fire resistance
03	70mm Rockwool 160kg/m ³ which provides 90 minutes' fire resistance
04	90mm Rockwool 160kg/m ³ which provides 120 minutes' fire resistance
05	130mm Rockwool 160kg/m ³ c/w 13mm layer of Insulfrax S which provides 240 minutes' fire resistance
06	40mm Rockwool 160kg/m ³ which provides 30 minutes' fire resistance for a Kitchen extract system
07	90mm Rockwool 160kg/m ³ which provides 60 minutes' fire resistance for a Kitchen extract system
08	130mm Rockwool 160kg/m ³ which provides 120 minutes' fire resistance for a Kitchen extract system
09	50mm Rockwool (RW5) 100kg/m ³ which provides 30 minutes' fire resistance
10	100mm (2x50mm) Rockwool Marine Batt which provides 60 minutes' fire resistance

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Construction Type	Description
01	Fabricated with similar methods of jointing / stiffening etc. as described in BS EN 1507 and DW144. i.e. J1,2,3... S1,2,3... sizing is related to actual duct sizes (see specific Construction Table)
02	Fabricated from sheet and RSA and fully welded to provide a gas tight construction, sizing is related to actual duct sizes (see specific Construction Table)
03	Fabricated from panel sections with a 50x50x5 RSA flange and 75x50x5 RSA stiffening frames
04	Fabricated with similar methods of jointing / stiffening etc. as described in BS EN 1507 and DW144 but specifically 30x30x5 RSA jointing and stiffening (see specific Construction Table)
05	Fabricated as CT1 with the exception on all duct body thickness to be 1.2mm – specifically for the Middle East region (see specific Construction Table)

Product Codes	CF / BS / 1 / ** / GS / 01 / R CF / BS / 2 / ** / GS / 01 / R	CF / BS / 1 / ** / SS / 01 / R CF / BS / 2 / ** / SS / 01 / R
Description	A Galvanised sheet steel or stainless steel ductwork system to provide a fire resistant duct as tested to BS 476 part 24	
System uses	General ventilation, kitchen, car park & smoke extraction and pressurisation systems	
Parameters	Duct A & B for up to 120min for stability, integrity and insulation	
Orientation	Horizontal and vertical applications	
Sizes	Up to 3000x3000	
Penetration	See drawing (CF/213, CF/311 & CF/312 -uninsulated) (CF/411 & CF/223-insulated)	
Wall/floor construction	Concrete / Masonry / steel or partition constructions suitably rated for the system.	
Pressure rating	Leakage class A, B, C & D as for DW144 constructed ductwork (CT2 only A-C)	
Insulation (**)	00, 01, 02, 03, 04, 06, 07 & 08	
Construction table ref	CT1 & CT2	

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Product Codes	CF / BS / 4 / ** / GS / 01 / R	CF / BS / 4 / ** / SS / 01 / R
Description	A Galvanised sheet steel or stainless steel ductwork system to provide a fire resistant duct as tested to BS 476 part 24	
System uses	General ventilation, kitchen, car park & smoke extraction and pressurisation systems	
Parameters	Duct A & B up to 240min for stability, integrity and 120min for insulation	
Orientation	Horizontal and vertical applications	
Sizes	Up to 3000x3000	
Penetration	See drawing (CF/213, CF/311 & CF/312 -uninsulated) (CF/411 & CF/223-insulated)	
Wall/floor construction	Concrete / Masonry / steel or partition constructions suitably rated for the system.	
Pressure rating	Leakage class A, B, C & D as for DW144 constructed ductwork (CT4 only A-C)	
Insulation (**)	00, 01, 02, 03, 04, 06, 07 & 08	
Construction table ref	CT3 & CT4	

Product Codes	CF / BS / 1 / ** / MS / 02 / R CF / BS / 2 / ** / MS / 02 / R	CF / BS / 1 / ** / SS / 02 / R CF / BS / 2 / ** / SS / 02 / R
Description	A Mild steel or stainless steel fully welded ductwork system to provide a fire resistant duct as tested to BS 476 part 24	
System uses	Kitchen extraction systems	
Parameters	Duct A & B for up to 120min for stability, integrity and insulation	
Orientation	Horizontal and vertical applications	
Sizes	Up to 3000x3000	
Penetration	See drawing (CF/213, CF/311 & CF/312 -uninsulated) (CF/411 & CF/223-insulated)	
Wall/floor construction	Concrete / Masonry / steel or partition constructions suitably rated for the system.	
Pressure rating	Leakage class A, B, C & D as for DW144 constructed ductwork (CT6 only A-C)	
Insulation (**)	00, 06, 07 & 08	
Construction table ref	CT5 & CT6	

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Product Codes	CF / BS / 4 / ** / MS / 02 / R	CF / BS / 4 / ** / SS / 02 / R
Description	A Mild steel or stainless steel fully welded ductwork system to provide a fire resistant duct as tested to BS 476 part 24	
System uses	Kitchen extraction systems	
Parameters	Duct A & B for up to 240min for stability, integrity and 120min for insulation	
Orientation	Horizontal and vertical applications	
Sizes	Up to 3000x3000	
Penetration	See drawing (CF/213, CF/311 & CF/312 -uninsulated) (CF411 & CF223-insulated)	
Wall/floor construction	Concrete / Masonry / steel or partition constructions suitably rated for the system.	
Pressure rating	Leakage class A, B, C & D as for DW144 constructed ductwork (CT8 only A-C)	
Insulation (**)	00, 06, 07 & 08	
Construction table ref	CT7 & CT8	

Product Codes	CF / BS / 1 / ** / GS / 01 / C CF / BS / 2 / ** / GS / 01 / C CF / BS / 4 / ** / GS / 01 / C	CF / BS / 1 / ** / SS / 01 / C CF / BS / 2 / ** / SS / 01 / C CF / BS / 4 / ** / SS / 01 / C
Description	A Galvanised sheet steel or stainless steel ductwork system to provide a fire resistant duct as tested to BS 476 part 24	
System uses	General ventilation, kitchen, car park & smoke extraction and pressurisation systems	
Parameters	Duct A & B for up to 240min for stability, integrity and 120min insulation (60min KE)	
Orientation	Horizontal and vertical applications	
Sizes	Up to 1250 Diameter	
Penetration	See drawing (CF/213, CF/311 & CF/312 -uninsulated) (CF411 - insulated)	
Wall/floor construction	Concrete / Masonry / steel or partition constructions suitably rated for the system.	
Pressure rating	Up to leakage class C as for DW144 constructed ductwork	
Insulation (**)	00, 01, 02, 03, 04, 06 & 07	
Construction table ref	CT9	

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Product Codes	CF / BS / 1 / 00 / GS / 05 / R CF / BS / 2 / 00 / GS / 05 / R	CF / BS / 1 / 00 / SS / 05 / R CF / BS / 2 / 00 / SS / 05 / R
Description	A Galvanised sheet steel or stainless steel ductwork system to provide a fire resistant duct as tested to BS 476 part 24	
System uses	General ventilation, kitchen, car park & smoke extraction and pressurisation systems	
Parameters	Duct A & B for up to 120min for stability and integrity only	
Orientation	Horizontal and vertical applications	
Sizes	Up to 3000x3000	
Penetration	See drawing CF/213, CF/311 & CF/312	
Wall/floor construction	Concrete / Masonry / steel or partition constructions suitably rated for the system.	
Pressure rating	Leakage class A, B, C & D as for DW144 constructed ductwork	
Insulation	00	
Construction table ref	CT10 – Middle East region only	

Product Codes	CF / BS / 4 / 05 / GS / 01 / R	CF / BS / 4 / 05 / SS / 01 / R
Description	A Galvanised sheet steel or stainless steel ductwork system to provide a fire resistant duct as tested to BS 476 part 24	
System uses	General ventilation, kitchen, car park & smoke extraction and pressurisation systems	
Parameters	Duct A & B for up to 240min for stability, integrity and insulation	
Orientation	Horizontal and vertical applications	
Sizes	Up to 3000x3000	
Penetration	See drawing CF223	
Wall/floor construction	Concrete / Masonry constructions suitably rated for the system.	
Pressure rating	Up to leakage class C as for DW144 constructed ductwork	
Insulation	05	
Construction table ref	CT13	