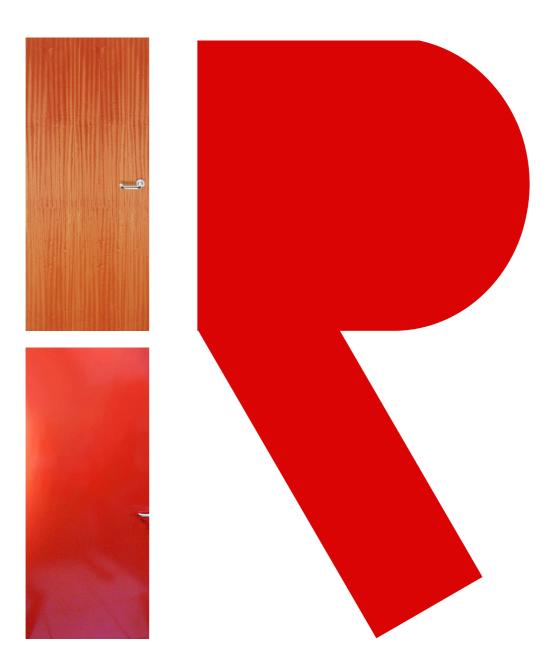




FIRE DOOR



TIMBER DOOR

Fire rated composite timber doors are available in 1hr & 2hr rating, the doors are tested in accordance with ISO and Singapore SS 332:2018.

APPLICATION

Fire rated timber doors are suitable for use in building but not for marine. It can be installed onto masonry wall and partition wall. Some of its areas of application include:

- Offices
- Hotels
- Hospitals
- Schools
- Condominiums and apartments etc.

CONSTRUCTION

1hr & 2hr timber door panels are made with internal 38/48mm thick composite timber door panel with both sides 3.6mm thick normal plywood finish. Door thickness 45/56mm. Door frame are made of Kapur timber (Frame Profile 140 x 50mm) or Electro Galvanized Frame 1.5mm thick (Frame Profile: 140 x 50mm), 10mm timber beading all round/without 10mm timber beading.

RECOMMENDED MAX DIMENSION

1hr/2hr Rated Fire Timber Door Approved Size:Double Equal Leaf2200 x 2700mmHSingle Leaf1000 x 3000mmH

ADDITIONAL FEATURES

- Vision Panel (Recommended size: 100 x 600 x 6mm Gerogian Wire Glass/Clear Fire Glass)
- Approved Laminates
- Fancy Veneer plywood

STEEL DOOR

Fire rated composite steel doors are available from 0.5hr to 2hr rating, the doors are tested in accordance with ISO and Singapore SS 332:2018.

APPLICATION

Fire rated steel doors are suitable for use in building but not for marine. It can be installed onto masonry wall and partition wall. Some of its areas of application include:

- Office buildings
- Factories/Warehouse
- Shopping mall
- MRT station
- Schools/College
- · Oil and gas plants (high durability and weather resistant are needed)

CONSTRUCTION

Hart's steel door panels are made of 1.2mm E.G steel sheet with internal supporting stiffeners running from the top edge of the panels to the bottom edge at equal interval. The stiffeners are also made of 1.2mm E.G steel sheets. All stiffeners are spot welded to the door panels. E.G steel U-channels are provided on the top and bottom edges of the doors. These U-channels allow the height of the doors to be altered at sites where there are changes in the site conditions. Steel frames are made of 1.5mm E.G steel with standard profile 140 x 50 (single/double rebate).

RECOMMENDED MAX DIMENSION

3700 (W) \times 3700 (H) for non fire rated doors and 2400 (W) \times 2400 (H) for fire rate doors up to 2 hours fire rating for double leaves doors.

ADDITIONAL FEATURES

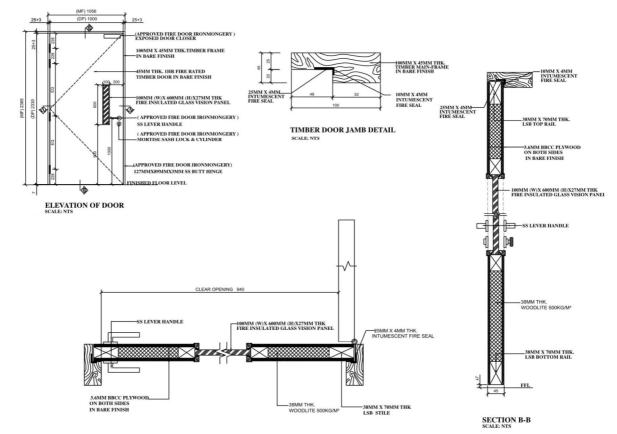
Hart's fire rated steel doors are stuffed with high quality rockwool in the door panels to provide the necessary fire resistant and thermal insulation properties. Compatible rating of vision panels are available with the doors using 5mm clear fire glass. The unique design of the vision panels allow easy removal of the frames so that any broken vision glass can be replaced easily.



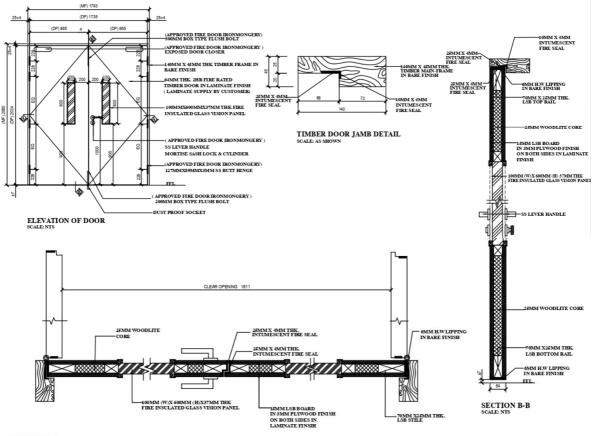


TIMBER DOOR WITH TIMBER FRAME DRAWING

Fire Rated 1hr Single Leaf Timber Door with Timber Frame Drawing



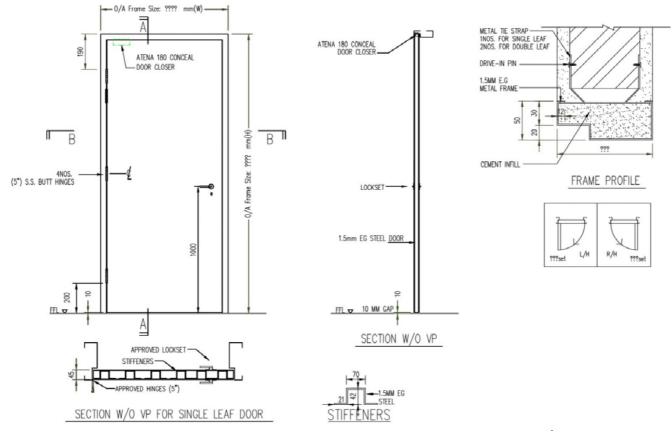
Fire Rated 2hr Double Leaf Timber Door with Timber Frame Drawing



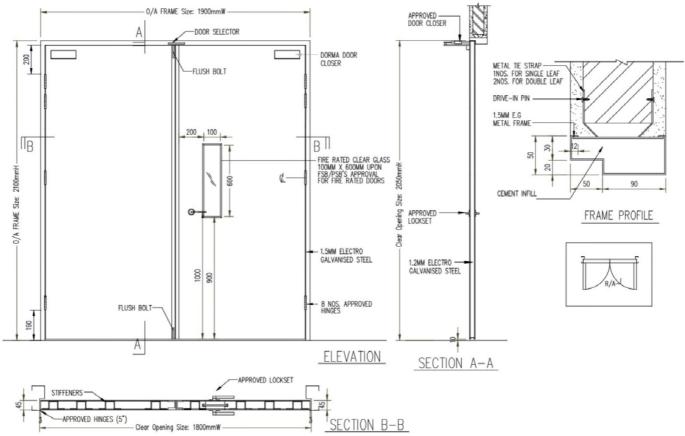
SECTION A-A

STEEL DOOR WITH STEEL FRAME DRAWING

Fire Rated Single Leaf - Steel Door with Steel Frame Drawing

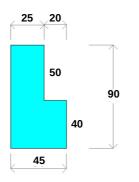


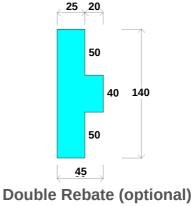
Fire Rated Double Leaf - Steel Door with Steel Frame Drawing



DOOR FRAME PROFILE

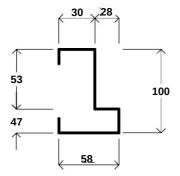
(A) Timber frame / Timber Door - using Kapur Timber or other approved equivalent



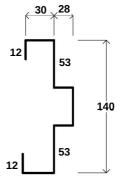


Single Rebate (standard)

(B) Pressed steel frame / Steel Door - 1.5mm Electro Galvanized Steel

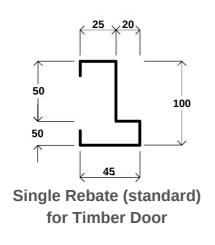


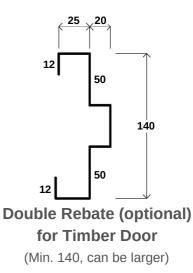
Single Rebate (standard) for Steel Door



Double Rebate (optional) for Steel Door (Min. 140, can be larger)

(C) Steel frame / Timber Door - 1.5mm Electro Galvanized Steel





Project references from 2000

2000	THOMSON MEDICAL CENTRE SINGAPORE GENERAL HOSPITAL NATIONAL JUNIOR COLLEGE CHANGI NAVAL BASE	2012	FACTORY @ 107 ENUOS AVE 3 NUH HOSPITAL STANDARD CHARTERED BANK @ 6 BATTERY RD WEST POINT BIZHUB AT TUAS SOUTH
	CHANGI NAVAL BASE		WEST POINT BIZHOB AT TOAS SOUTH
		2013	C 921
	PUNGGOL SECONDARY SCHOOL JURONG POINT SHOPPING MALL	2013	NUS (YALE)
	TUAS POWER STATION		
	7-STOREY FACTORY @KAKI BUKIT ROAD 3	001/	NUS (YALE) GWA - YISHUN
2001	POLICE STATION AT CHANGI AIRPORT	2014	SGH ACADEMIA
	BUKIT BATOK GROVE SECONDARY SCHOOL		24,24A CHAI PING RD
	SEMBAWANG SECONDARY SCHOOL		
	IUP-HDB PROJECTS		SEDONA (YANGON, MYANMAR)
	ARMY LOGISTICS		CHINA RAILWAY (MRT)
		2015	SULE TRADER HOTEL (YANGON, MYANMAR)
	CHANGI BUSINESS PARK	2013	SENG KANG EC UNITED WORLD COLLEGE
2002	LRT-C810 PUNGGOL, SENGKANG STATION		SUNGEI KADUT LOOP
	IPAM/CIVIL SERVICES COLLEGE AT NUS		NTU
	SEMBCORP WAREHOUSE AT 16, JALAN BUROH		
			NTU
2003	TANGLIN SECONDARY SCHOOL		TUAS SOUTH
	YISHUN SECONDARY SCHOOL		TAI SENG
000/			THE GREEK
2004	KPE C421 & C422 KALLANG EXPRESS WAY		ST JOHN WOODLAND LINK
		2016	SINGAPORE GENERAL HOSPITAL
2005	C856 MRT AT HARBOURFRONT STATION	2010	42 BEACH ROAD
			C927
	DSTA-CAMP PROJECT		CHANGI GENERAL HOSPITAL
2006	NATIONAL UNIVERSITY HOSPITAL		73 BUKIT TINGGI TD
	KK HOSPITAL		CHANGI AIRPORT
			45 UBI RD 1
2007	INTERNATIONAL BUSINESS PARK		TUAS AVE 2
	NATIONAL UNIVERSITY OF SINGAPORE	0017	PARKWAY CANCER CENTER
		2017	PUH HLAING HOTEL (MYANMAR)
	CHANGI GENERAL HOSPITAL		EVONIK
2008	HDB AREA OFFICE AT BUKIT BATOK		
	A & A WORKS AT COMMERCIAL BUILDING		STATECOURT
		2010	DOJO
	A & A WORKS AT 60, ROBINSON RD	2018	SYSCON PTE LTD SCIENCE PARK
2009	9-STOREY FACTORY @1, COMMONWEALTH LANE		CONFECTIONARY FACTORY
	NASSIM PARK CONDO		CONFLOTIONART FACTORT
	LORONG MELAYU APARTMENT		FUNAN
			SENOKO SOUTH ROAD
	ELLIOT CONDO		FOREST WOOD
	AUOSITE AT 10 TAMPINES INDUSTRIAL AVE 3		RAFFLES GRIL'S HIGH SCHOOL
0010	UPPER JURONG RD CLUB HOUSE MARINA COSTAL EXPRESS WAY	2019	WILDRICE THE CENTRAL YANGON
2010	THONG CHAI MEDICAL INSTITUTION	2013	SHWE NA GAR
	ORCHARD TURN-LTA		WOODLANDS BUS INTERCHANGE
	KIM SENG RD CONDO		NO.6 SENOKO SOUTH
	MRT-C854, FARRER RD STATION		PUB WOODLEIGH
			CONTAINER DOOR
	RESORTS WORLD SENTOSA		
	FACTORY/WAREHOUSE AT 10 TOH GUAN RD		
2011	CASPIAN CONDO		
	ADAM RD APARTMENT	HART	ENGINEERING (PRIVATE) LIMITED
	HYFLUX		11 Tool Access 0.01

11 Tuas Avenue 2 Singapore 639450 Tel: (65) 6291 2611 Fax: (65) 6296 4514 Email: info@hart.sg Web: www.hart.com.sg

HART ENGINEERING PTE LTD

HYFLUX