



FIRE SAFETY SOLUTIONS

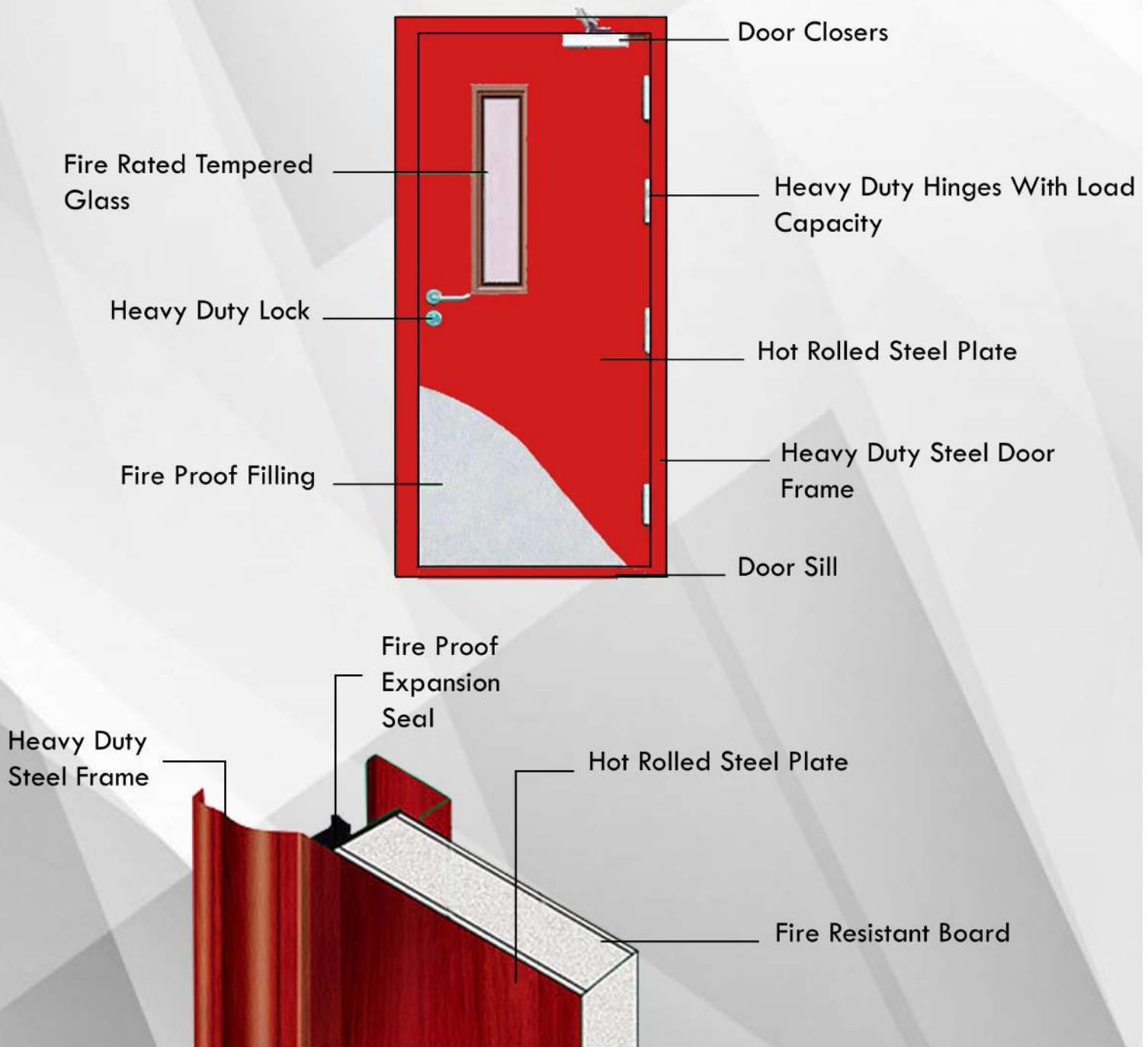
FIRE RATED DOORS





FIRE SAFETY SOLUTIONS

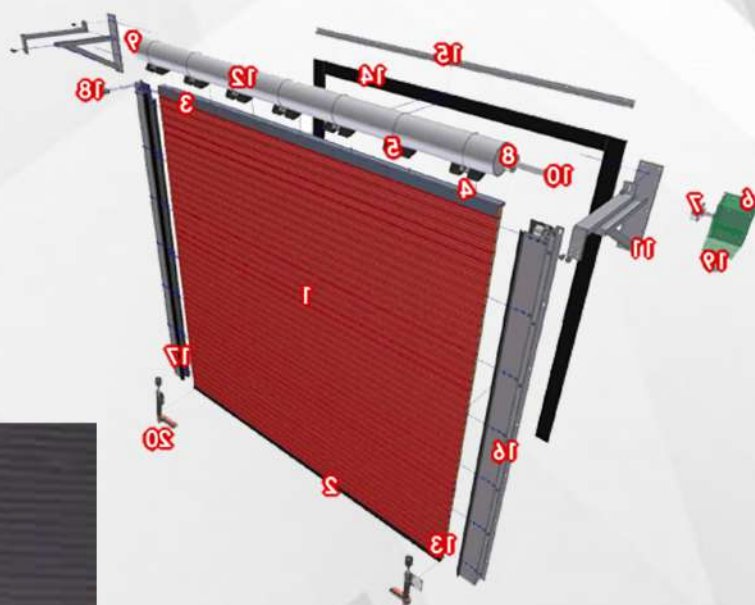
FIRE RATED DOORS





FIRE SAFETY SOLUTIONS

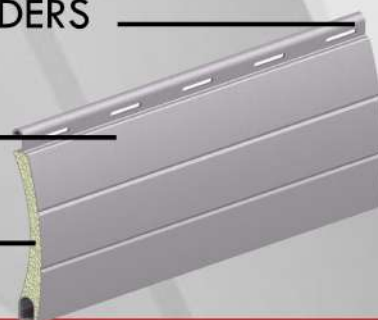
FIRE RATED ALUMINIUM ROLLER SHUTTER



ALUMINIUM EDGE BORDERS

ALUMINIUM PROFILE

FIRE PROOF FILLING





FIRE SAFETY SOLUTIONS

IRON DOORS & GATES

Openable Iron Door

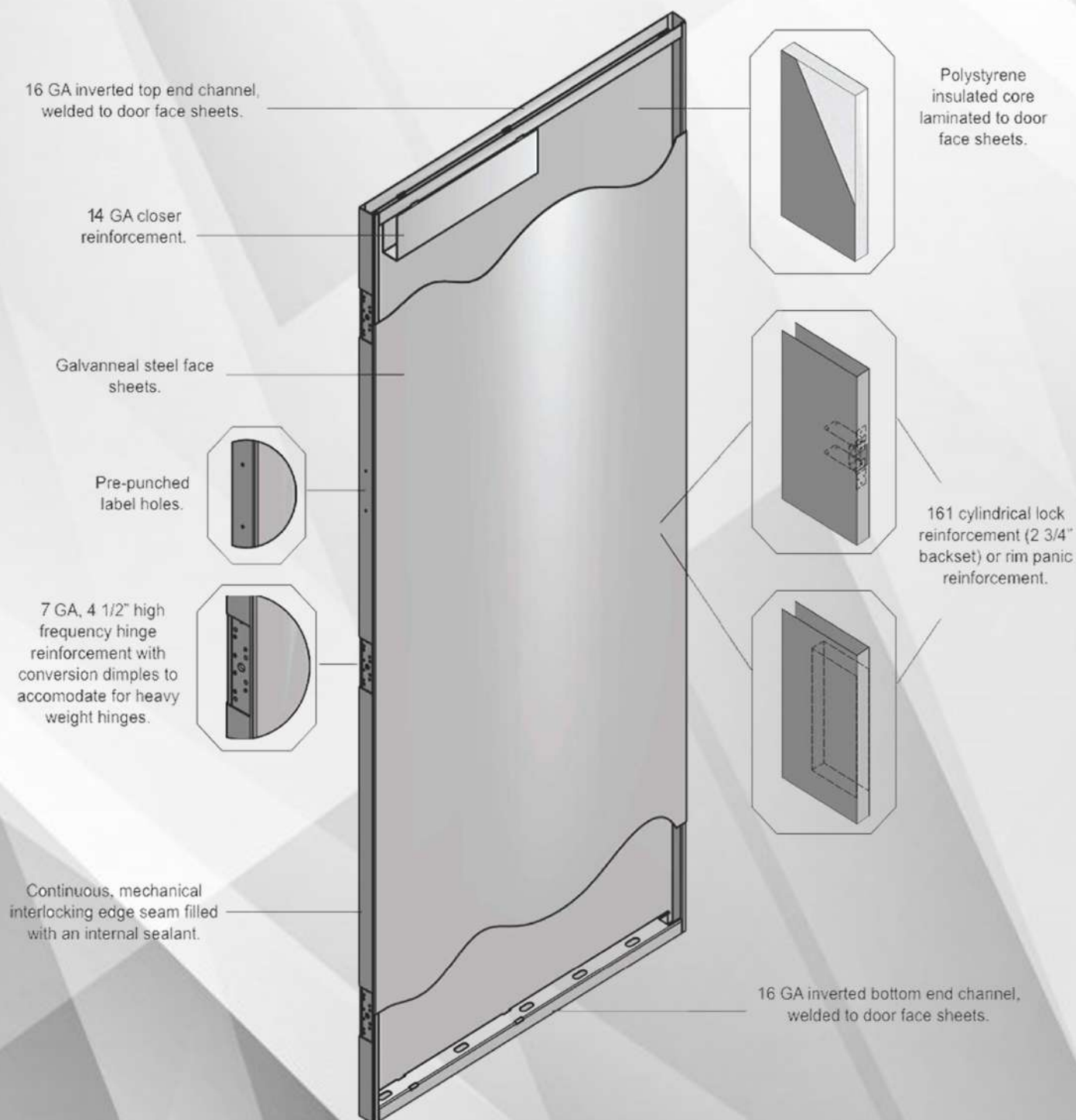


Sliding Iron Door



FIRE SAFETY SOLUTIONS

IRON DOORS & GATES





FIRE SAFETY SOLUTIONS

IRON DOORS & GATES



Heavy Duty Iron
Gates



FIRE SAFETY SOLUTIONS

FIRE RATED DOORS



FIRE RATING: CLASS A



HIGH QUALITY COLOR COATING



GERMAN TECHNOLOGY



FIRE PROOF CORE (EUROPIAN)



BEST QUALITY DOOR LOCKS



**FABRICATION IN ACCORDANCE
WITH ANSI/SDI 118.5, NFPA 80-
1999, NFPA 252-1995, UL 10C &
BS 476, PARTS 20 & 22**



FIRE SAFETY SOLUTIONS

16 gauge steel door panels according to Fire Rating.

12 gauge steel frame.

Quick Fit frames are ready-to-install into pre-existing door openings.

Minimum Door thickness 1 3/4 inches (44mm).



Reinforced core frame with stiffeners and filled with Ceramic wool insulation which can resist temperature up to 1300 centigrade.

Reinforced at hardware locations.

Heavy duty ball bearing steel hinges.

All doors with self-closing and self-latching Fire Rated / Certified hardware.

Smoke seal and intumescent strip to stop cold smoke and flame spread (optional)

Fabrication in accordance with ANSI/SDI 118.5, NFPA 80-1999, NFPA 252-1995, UL 10B, UL 10C and BS 476, Parts 20 & 22.



FIRE SAFETY SOLUTIONS

TEST CERTIFICATE OF HOT ROLLED PLATE

THIS IS CERTIFIED THAT THE GOODS MENTIONED-ABOVE HAVE BEEN INSPECTED IN RESPECT OF QUALITY AND WEIGHT AND IT IS ASCERTAINED THAT QUALITY AS BELOW

HEAT NO.	COIL NO.	WEIGHT (MT)	DIMENSIONS		Chemical Composition (%)						Mechanical Properties		
			THICKNESS (mm)	WIDTH (mm)	CE10 ³	SI10 ³	MN10 ³	P20 ³	S10 ³	CU10 ³	Y.S. (MPa)	T.S. (MPa)	ELONG. (%)
18106134	88H06317100	27.18	3	1500	19.3	5	11	16	6.5	333	346	461	21.5
18106134	88H06317200	27.17	3	1500	19.3	5	11	16	6.5	333	346	461	21.5
18106152	88H06312000	27.55	7	1500	20.8	12	12	25	3.2	333	390	510	21
18106361	89H01414000	24.24	6	1220	20.9	5	11	24	6.7	349	388	488	21.5
18206267	88H06304900	27.1	4	1500	19.8	7	14	20	5.3	333	370	459	23.5
18206278	88H06320200	26.69	6	1500	20.4	8	15	20	6.5	380	375	492	21
18206278	88H06320300	27.24	6	1500	20.4	8	15	20	6.5	380	375	492	21
18206278	88H06320400	27.25	5	1500	20.4	8	15	20	6.5	380	346	461	21.5
18206479	89H01200700	23.79	8	1220	19.7	10	14	13	5.8	328	378	487	22
18206484	89H01210400	24.27	3	1220	19.7	6	14	22	2.9	327	345	484	36
18206494	89H01409500	23.94	5	1220	20	9	14.6	18	1	380	400	503	22
18206494	89H01409600	23.94	5	1220	20	9	14.6	18	1	380	400	503	22
18206501	89H01403000	23.93	7	1220	19.8	5	20	25	3.6	325	380	475	22
18306875	89H01412600	23.4	10	1220	19.5	6	10	16	4.1	302	373	509	22.5
18306878	89H01414800	24.18	4	1220	21	5	12	20	3.6	332	359	471	33
18306880	89H01415900	24.15	4	1220	19.4	3	12	19	6.5	327	359	471	33

For and on behalf of

TONGHUA IRON AND STEEL CO., LTD.



Authorized Signature(s)

[Handwritten Signature]

Peoples Steel Mills Ltd.

Manufacturers of Alloy and Special Steels - ISO 9001:2008 Certified



TEST REPORT

QUALITY ASSURANCE AND DEVELOPMENT DEPARTMENT (QAD)

Messrs : Pakistan Standards & Quality Control Authority.
Shape of Material : Sheet
Alloy Grade :
Condition : As received
Environmental Conditions : Temperature: °C Humidity: (%) (Not applicable)

Report Date : 07-09-2018
Receiving Date : 04-09-2018
Lab's Reference No. : NO-40328 / MTR-5003
Customer's Ref No. : 71219 - dt: 04-09-2018
Page No. : 1/1

S.No.	Sample ID	Chemical Composition (WL%)											Mechanical Properties					
		Element	C *	Si *	Mn *	P *	S *	Cr *	Ni *	V *	Co *	Cu	Test Method	Yield * Strength (Mpa)	Tensile * Strength (Mpa)	Elongation * at 50mm G.L (%)	Bend Test at 180°	Test Method
		Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01	-	Actual	0.021	0.39	1.45	0.040	< 0.01	18.54	8.06	0.10	0.22	0.04	ASTM E-1086 & E-1019	368	775	46	OK	ASTM A-370
		Exp. Uncertainty																

Note:

1. Uncertainty values will be provided on request.
2. The report/sample retention period is 3 months.
3. * Shows Accredited as per ISO 17025

Remarks:

As received sample has been analyzed by Optical Emission Spectrometer. Carbon & Sulfur analyzed by Rapid Analyzer. Tensile testing was carried out by DT&T Tensile Testing Machine. The sample does not represent any lot.

We hereby certify that the above results are true and correct in every detail

[Signature]
Tested By
(Assistant Manager)

[Signature]
Checked By
(Deputy General Manager)

[Signature]
Issued By
(General Manager)

Factory: Javelan Nagar, Manghopir, Karachi, Pakistan. PABX: 36770126, 36770127, 36770128 Fax: (92-21) 36770112, E-Mail: psm@digicom.net.pk

End of Report



TEST CERTIFICATE OF HOT ROLLED PLATE

TONGHUA IRON AND STEEL CO., LTD.

MILL TEST CERTIFICATE

ORIGINAL

DATE : SEP 20 2018

REF NO. TISCOMTC18080304

DESCRIPTION OF GOODS

COMMODITY: PRIME HOT ROLLED ALLOY STEEL COILS

GRADE: S5400CR

SIZE(MM)	QUANTITY(M/TONS)	NUMBER OF COILS (COILS)
3.00 X 1220	24.27	1
4.00 X 1220	48.33	1
5.00 X 1220	47.88	2
6.00 X 1220	24.24	1
7.00 X 1220	23.93	1
8.00 X 1220	23.79	1
10.00 X 1220	23.40	1
3.00 X 1500	54.35	2
4.00 X 1500	27.10	2
5.00 X 1500	27.25	1
6.00 X 1500	53.93	2
7.00 X 1500	27.55	1
TOTAL	406.02	16

FIRE PROOF FILLING CERTIFICATE

**dupré
Minerals**

Vermiculite

www.dupre-vermiculite.co.uk

**dupré
Micalite™**

FIRE RESISTANT BOARD

Description

This product is a non-combustible, fire resistant vermiculite board. Micalite Fire Resistant Boards are easily cut to shape. They have excellent thermal insulation properties and minimal shrinkage at high temperatures. Micalite Fire Resistant Boards are the ideal product to use in the construction of wood burning stoves among other applications; providing fire protection exactly where it's needed. Boards with a 'reeded', herringbone or 'brick-effect' surface pattern are also available in standard sizes. User-defined shapes can also be cut to order.



Product			DMS750	DMS600
Classification Temperature		°C	1100	1100
Bulk Density		Kg/m ³	700-900	600-650
Cold Compression Strength		N/mm ²	6.0	4.5
Cold Modulus of Rupture		N/mm ²	4.0	2.5
Thermal Conductivity	200°C	W/mK	0.18	0.16
	400°C	W/mK	0.20	0.18
	600°C	W/mK	0.21	0.20
Shrinkage (1100°C/12hr)		%	<2.0	<2.0
Thermal Expansion (20 - 700°C)		%	0.94	0.94
Specific Heat Capacity		kJ/kg K	1.15	1.15
Plane Parallelism +/-		mm	0.2	0.2
Colour			Beige	Beige
Board Sizes		mm	1020 X 620mm	1020 X 620mm
			1250 X 1000mm	1250 X 1000mm
Board Thicknesses		mm	10, 12, 15, 20	50mm
			25, 30, 40, 45mm	

Information presented above is given in good faith as accurate and reliable but is not to be taken as a guarantee. The figures provided are intended to be a guide to expected average values and should not be interpreted as a specification. Any potential applications referred to are not to be construed as recommendations. It is the responsibility of the user to determine suitability for any specific purpose.

ISSUE 181212



FIRE SAFETY SOLUTIONS

OUR VALUABLE CLIENTS



中国水电顾问
HYDROCHINA

TAPAL WIND POWER PROJECT 30MW
MASTER WIND POWER PROJECT 50MW
SACHAL WIND POWER PROJECT 50MW
SAPPHIRE WIND POWER PROJECT 50MW
HAWA WIND POWER PROJECT 50MW
JHIMPIR WIND POWER PROJECT 50MW
HAE WIND POWER PROJECT 50MW
TRICON BOSTON WIND POWER PROJECT 150MW



HUBCO PROJECT
PIBT PROJECT
KPT PROJECT
SAPT PROJECT



UEP WIND POWER PROJECT



中国水电
SINOHYDRO



SEPCO III ELECTRIC POWER PLANT

TBEA 特变电工

OURSUN SOLAR PROJECT 50MW (GHARO)



中国化学工程股份有限公司
CHINA NATIONAL CHEMICAL ENGINEERING CO., LTD.

ENGRO POLYMER & CHEMICALS PLANT

And Many More...

BLAZE

FIRE SAFETY SOLUTIONS

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AMS INDUSTRIAL & ENGINEERING COMPANY



Email: amsindustrial.engg@gmail.com **Contact:** 0315-7011256