

# CATALOGUE



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**TABALSA**  
A r a b i a



SPECIALISTS IN ELECTRICAL CANALIZATIONS

# Piping your ideas



Hospitals



Sports fields



Metro - Train



Shopping centres



Industry



Car parks

We are pleased to present you **TABALSA ARABIA**, a company rich in tradition and experience offering you highest service level and attractive products.

With our achieved experience in EMT manufacturing, one of our major goals is to bring this rich know-how to the Saudi Market to further get closer to our customers and increase their satisfaction. The state-of-the-art factory we have built in KSA should give us more advantage and access to one of the biggest markets in the gulf. We have established over 70% of Market share in Spain and as a result of our team's dedicated efforts to be a global leader.

With our leading technologies that surpass the competition and make us stand from the rest of the crowd in coupling and connections, you can finally meet a brand to be comfortable in using and peace of mind when dealing with.

We hereby present to you our catalog trusting it would meet your satisfaction. This catalogue is the outcome of the effort and hopes of our team of professionals, who work hard to keep the **TABALSA Group** on top of the rigid electrical installations market. The company's sustainable growth and investment in R&D in the recent years has allowed a thorough optimization of our group's activities.



**TABALSA ARABIA** forms part of the prestigious **TABALSA Group** located in Barcelona, Spain. **TABALSA**, **TALLERES BALCELLS, S.A.** was established in 1952 in Barcelona, originally as the business "RAMON BALCELLS, S.A.", created in 1921 by the homonymous entrepreneur. Being **TALLERES BALCELLS, S.A.** the first company in Spain to manufacture steel pipes for electrical installations, nowadays **TABALSA** is Spain's unquestionable leader in rigid conduit cable management systems for electrical and telecom applications. Our presence in practically all European countries as well as in Northern Africa and our experience of more than 85 years has turned us into a reference in the sector.

Following the **TABALSA GROUP's** ambitious growth plan, we are now also present in Saudi Arabia, who's economical and social environment converts this country in the perfect destination for our endeavour to expand. We are confident that **TABALSA ARABIA** will be within a short time as successful as its European parent company already is.



## CEO Message

*Electrical Metallic Tubes* shortly known in the industry as “**EMT**” is the sole product being manufactured by Tabalsa-Arabia, a member of ETE Group of Companies in Saudi Arabia. Though it comes in various types however, it is mainly used for protecting and routing of electrical wiring commonly applied in commercial & industrial buildings. In addition, Tabalsa Arabia Factory produce all kind of fittings available on the market but even our own specific design from Tabalsa Spain witch will be the future couplings in GCC market.

Driven by stronger business foresights, ETE Group embarked on a joint-venture business with a major Spanish company TABALSA-TALLERES BALCELLS, S.A. engaged into production of EMT across Europe, forming a new independent entity known as, Tabalsa-Arabia. This idea came about as anticipating move, after ETE Group’s top management team had sensed a positive stimulus in the construction industry- characterize by a massive socio-economic projects being planned everywhere in the region- that would likely trigger a high demand for EMT in the next few years. Armed with positive outlook and determination to grasp every opportunity that comes in the way, it didn't take so much long until the mid of 2009 when the first batch of EMT were successfully produced by Tabalsa-Arabia through a state-of-the-art production facility located at Dammam Second Industrial Area.

However, just like any other field of business endeavor, while on the process of obtaining International Certificates & Recognition. Finally, hard work and perseverance bear its fruits when Underwriters Laboratories (UL) an American-based independent safety and quality certification organization, has granted approval on Tabalsa-Arabia’s EMT products, that is of course after going through a tedious & grueling scientific procedures.

Having been bestowed with this prestigious honor and certification gives Tabalsa-Arabia a competitive edge in the stiff market competition since it could automatically translates to big boost on sales as it lays the foundation on customers’ trust on product quality.

Year by year Tabalsa-Arabia Factory is consolidating on local market (KSA) as a leader manufacturer due to big growth of sales by quality of all its products. Export sales in GCC began 2 years ago under the own normative of each country.

Finally, as our main mission, our team is focused on satisfying the needs of clients and we work always beside the projects and the purchasing-technical departments.

Our vision is to be a referent in canalization in GCC countries.

C.E.O.

Tabalsa Arabia Factory

The TABALSA Group has an ambitious growth plan, developed by a sustainable market expansion for the last five years ago, and whose objective is to achieve undeniable leadership in rigid electrical systems. The constant effort on continuous improvement and on the increase of TABALSA's quality standards has been proved obtaining new product certifications and the quality certification ISO 9001.



The TABALSA Group's European production centers have a ground area of 10,000 square meters in the Barcelona's Free Port Industrial Area. Our spacious facilities include a modern and comprehensive laboratory for research and testing, where a large staff of engineers and scientists dedicate their efforts to the research of new materials, installation solutions and innovative products.



## ❖ Quality Approvals

○ ISO 9001 : 2008



○ UL 797 - E 337692



○ UL 514B - E 483095



○ UL 514B - E 483096



○ UL 514B - E 475276



○ Conformance – UL 797/ANSI C80.3



○ Aramco Vendor ID - 10058245



○ SECO Vendor ID - 2005873



○ SABIC Vendor ID - 508266



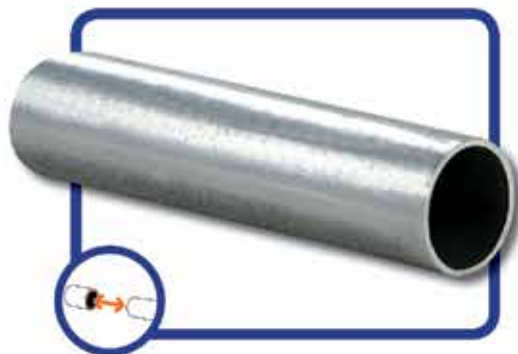
○ MARAFIQ Vendor ID - 4212



## > EMT PIPE TA



ARAMCO  
VENDOR ID 10058245



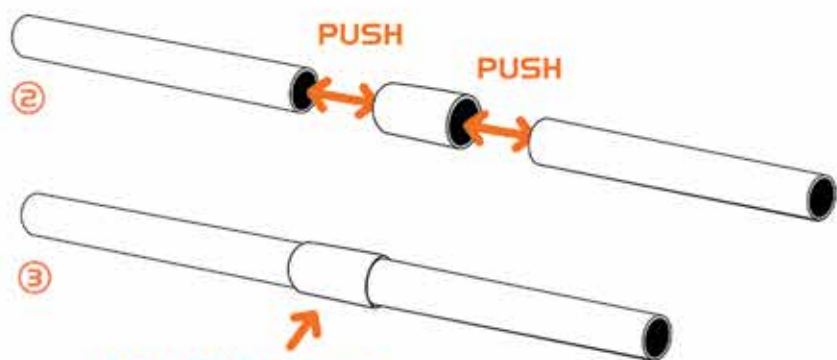
**PRODUCT:** Pipe  
**MATERIAL:** Steel  
**EXTERIOR SURFACE:** Galvanised.  
 Weld protection by metallised Zinc  
**INTERIOR SURFACE:** Galvanised.  
 Additional protection by antioxidant paint  
**THREAD:** Unthreaded  
**CONFORMANCE:** UL797 / ANSI C80.3  
**LENGTH:** 3,05 metre



Part No.	Size [inch]	Ø Outside [mm]	Min. Wall Thickness [mm]	Ø Inside [mm]	Weight [kg/pc]	Bundle [pcs]	Bundle [kg]
EMT050-	1/2	17,9	1,05	15,8	1,33	10	13,3
EMT075-	3/4	23,4	1,25	20,9	2,08	10	20,8
EMT100-	1	29,5	1,55	26,4	3,26	5	16,3
EMT125-	1 1/4	38,4	1,55	35,3	4,30	5	21,5
EMT150-	1 1/2	44,2	1,55	41,1	4,97	5	24,85
EMT200-	2	55,8	1,55	52,7	6,32	3	18,96



**EASIER  
CHEAPER  
FASTER**



**EMT COUPLING TA**

## EMT BEND TA <



EUROPEAN  
SPAIN  
TECHNOLOGY



**PRODUCT:** Bend 90°

**MATERIAL:** Steel

**EXTERIOR SURFACE:** Galvanised.

Weld protection by metallised Zinc

**INTERIOR SURFACE:** Galvanised.

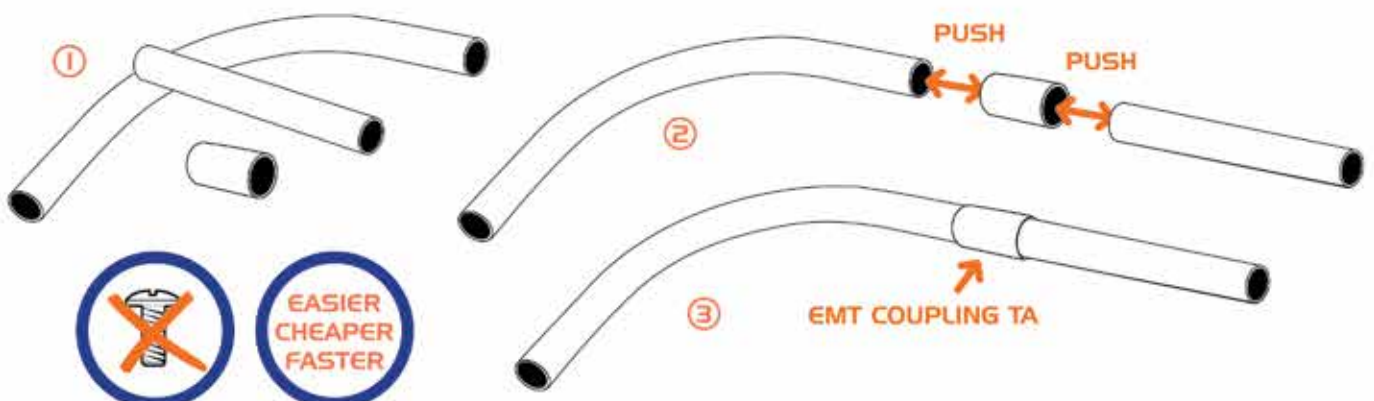
Additional protection by antioxidant paint

**THREAD:** Unthreaded

**CONFORMANCE:** ANSI C80.3

**APPLICATION:** Used for change of direction

Part No.	Size (inch)	Ø Outside (mm)	Min. Wall Thickness (mm)	Ø Inside (mm)	Length (mm)	Weight (kg/pc)
ELB050-	1/2	17,9	1,05	15,8	295	0,129
ELB075-	3/4	23,4	1,25	20,9	295	0,201
ELB100-	1	29,5	1,55	26,4	390	0,353
ELB125-	1 1/4	38,4	1,55	35,3	455	0,549
ELB150-	1 1/2	44,2	1,55	41,1	550	0,745
ELB200-	2	55,8	1,55	52,7	700	1,141





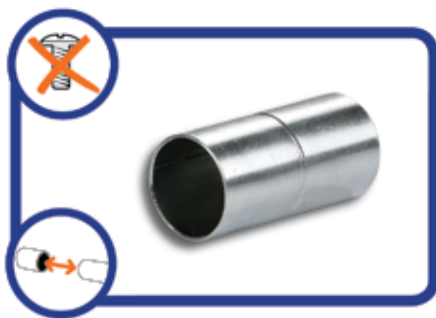
# 3 IN 1

## HIGH TECHNOLOGY INSTALLATION SYSTEM



- > Easy installation without tools
- > Installation with highly aesthetic aspect
- > Saves money by saving working time

### SAFE FIXATION WITH NUMEROUS ADVANTAGES | PATENTED SYSTEM



#### > EMT COUPLING TA

**PRODUCT:** Coupling

**MATERIAL:** Steel

**EXT. SURFACE:** Electrozinc coated

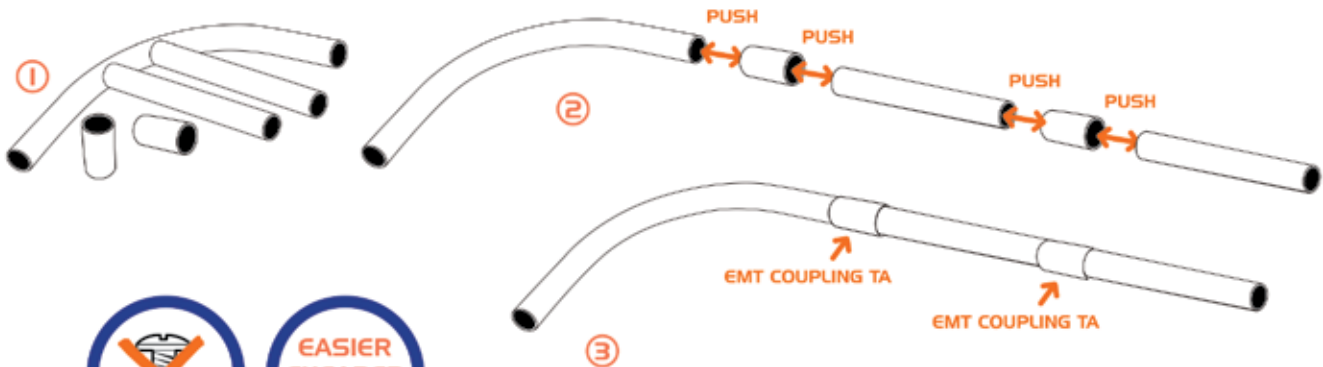
**INT. SURFACE:** Electrozinc coated

**THREAD:** Unthreaded

**CONFORMANCE:** ANSI C80.3

**APPLICATION:** Connection of unthreaded pipes and bends

Part No.	Size (inch)	Ø Outside (mm)	Min. Wall Thickness (mm)	Ø Inside (mm)	Length (mm)	Weight (kg/pc)
CPP-050	1/2	20,40	0,95	18,40	50	0,025
CPP-075	3/4	26,00	1,05	23,90	54	0,035
CPP-100	1	32,70	1,15	30,00	64	0,051
CPP-125	1 1/4	41,70	1,25	38,90	74	0,092
CPP-150	1 1/2	47,70	1,25	45,20	95	0,136
CPP-200	2	59,90	1,55	56,80	110	0,245



**EASIER  
CHEAPER  
FASTER**

## ❖ EMT Set Screw Connector - Zinc Die Cast

- Application : Use to join one length of Electric Metallic Tubing to knock out in concrete tight-box or dry location applications.
- Specification Reference : UL 514B
- UL File Number: E475276

Part No.	Conduit Size
SSCN-050	1/2"
SSCN-075	3/4"
SSCN-100	1"
SSCN-125	1 1/4"
SSCN-150	1 1/2"
SSCN-200	2"



## ❖ EMT Set Screw Coupling - Zinc Die Cast

- Application : Use to Couple two ends of Electrical Metallic Tubing.
- Specification Reference : UL 514B
- UL File Number: E475276

Part No.	Conduit Size
SSCP-050	1/2"
SSCP-075	3/4"
SSCP-100	1"
SSCP-125	1 1/4"
SSCP-150	1 1/2"
SSCP-200	2"



## ❖ EMT Compression Connector - Zinc Die Cast

- Application: Use to terminate Electrical Metallic Tubing to metal Box.
- Specification Reference: UL 514B
- UL File Number: E475276

Part No.	Conduit Size
CCN-050	1/2"
CCN-075	3/4"
CCN-100	1"
CCN-125	1 1/4"
CCN-150	1 1/2"
CCN-200	2"



## ❖ EMT Compression Coupling - Zinc Die Cast

- Application : Use to Couple Electrical Metallic Tubing to metal Box.
- Specification Reference : UL 514B
- UL File Number: E475276

Part No.	Conduit Size
CCP-050	1/2"
CCP-075	3/4"
CCP-100	1"
CCP-125	1 1/4"
CCP-150	1 1/2"
CCP-200	2"



## ❖ EMT Strap

- Application : Use to support the Electrical Metallic Tubing to a mounting surface.
- Finish : Electro Galvanized Steel
- UL File Number: E483096

### ❖ One Hole Strap

Part No.	Conduit Size
OSP-050	1/2"
OSP-075	3/4"
OSP-100	1"
OSP-125	1 1/4"
OSP-150	1 1/2"
OSP-200	2"



### ❖ Two Hole Strap

Part No.	Conduit Size
TSP-050	1/2"
TSP-075	3/4"
TSP-100	1"
TSP-125	1 1/4"
TSP-150	1 1/2"
TSP-200	2"



## ❖ EMT Conduit Bushing – Insulated

- Application : Used to protect sharp edges by place the bushing over the end of electrical tubing.
- UL File Number: E483095

Part No.	Conduit Size
CB-050I	1/2"
CB-075I	3/4"
CB-100I	1"
CB-125I	1 1/4"
CB-150I	1 1/2"
CB-200I	2"



## ❖ EMT Conduit Bushing - Zinc Die Cast

Part No.	Conduit Size
CB-050	1/2"
CB-075	3/4"
CB-100	1"
CB-125	1 1/4"
CB-150	1 1/2"
CB-200	2"



## ❖ EMT Lock Nut - Zinc Die Cast

- Application : Use one end of threaded connectors to a Steel out let box or metal enclosure.

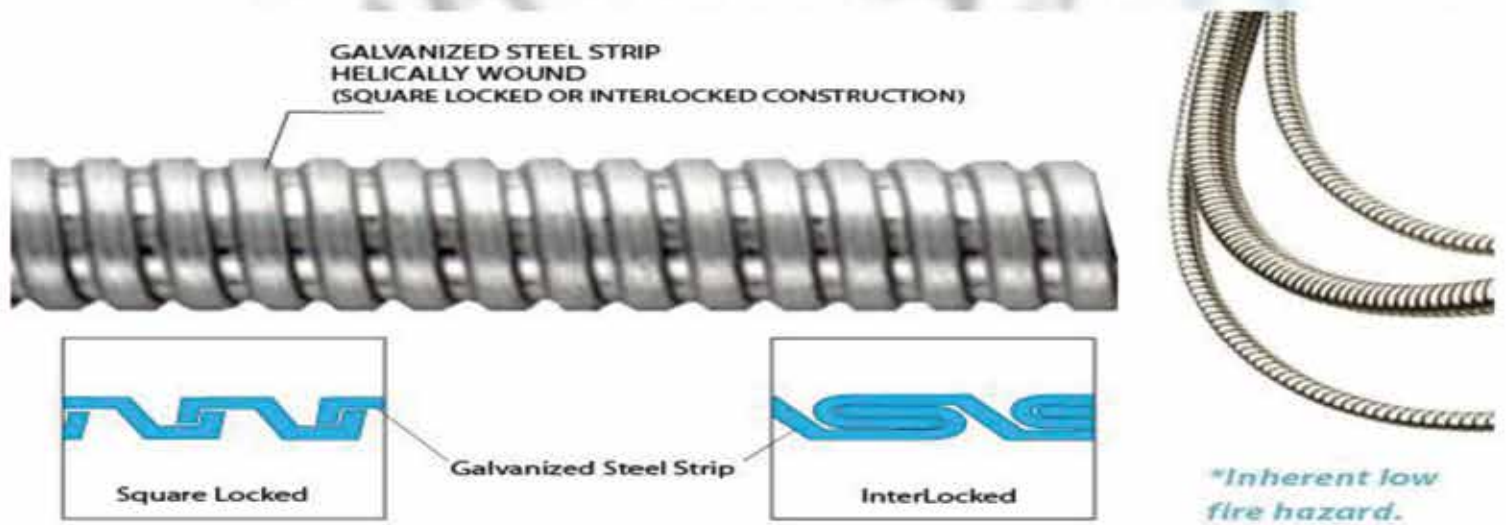
Part No.	Conduit Size
ZLN-050	1/2"
ZLN-075	3/4"
ZLN-100	1"
ZLN-125	1 1/4"
ZLN-150	1 1/2"
ZLN-200	2"





## ❖ Galvanized Steel Flexible Conduit

- Application : Widely used for general electrical wiring where flexibility and mechanical protection are required.



Part No.	Trade Size	Inside Dia (mm)	Outside Dia (mm)	Length (m)
GFC-18	1/2"	18	21	30
GFC-22	3/4"	22	25.5	30
GFC-27	1"	27	31	30
GFC-35	1 1/4"	36	41	15
GFC-40	1 1/2"	42	47	15
GFC-51	2"	54	62	10



## ❖ Liquid Tight Steel Flexible Conduit

- Application : Liquid Tight Steel Flexible Conduit manufactured using Galvanized Steel resistant to oil and grease. Helically wound flexible conduit is available with smooth wipe clean outer cover or PVC cover, this make them UV resistant and can be used for external use.
- Specifications : Working temperature Min. - 20 degree C Max. + 105 degree, IP Rating : IP66+ IP67 + IP68 (5 bar)
- Features : Flexible construction , Corrosion resistance, Smooth interior for easy wire pull through , Flexibility in an economic design,
- High mechanical strength.



Part No.	Trade Size	Internal Diameter (mm)		External Diameter (mm)		Min Bend Radius	Coil Packing
Code	Inch	Min	Max	Min	Max	mm	Meter
LFC-16	1/2"	15.8	16.3	20.8	21.3	65	30
LFC-20	3/4"	20.7	21.2	26.2	26.7	75	30
LFC-25	1"	26.4	26.8	32.7	33.4	100	30
LFC-32	1 1/4"	35.4	35.5	41.4	42.2	120	15
LFC-38	1 1/2"	40.1	40.6	47.4	48.3	140	15
LFC-51	2"	51.3	51.9	59.4	60.3	180	10



## ❖ Straight Squeeze Connector

- Application : squeeze type connectors are used to terminate flexible metal conduit to a 1/2" knockout in a dry location box or enclosure.
- UL File Number: E483095

Part No.	Conduit Size
SSC-050	1/2"
SSC-075	3/4"
SSC-100	1"
SSC-125	1 1/4"
SSC-150	1 1/2"
SSC-200	2"



## ❖ Straight Liquid Tight Connector

- Application : Liquid Tight type connectors are used to terminate L.T flexible metal conduit to a 1/2" knockout in a dry location box or enclosure.
- UL File Number: E483095

Part No.	Conduit Size
SLT-050I	1/2"
SLT-075I	3/4"
SLT-100I	1"
SLT-125I	1 1/4"
SLT-150I	1 1/2"
SLT-200I	2"



## ❖ EMT Combination Coupling

- Application : A combination coupling to provide a transition from EMT to flexible metal conduit.

Part No.	Conduit Size
ESC-050	1/2"
ESC-075	3/4"
ESC-100	1"



## Applications and technical calculations

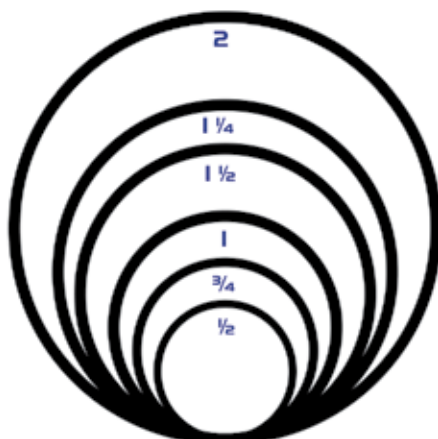
	WHERE TO INSTALL EMT STEEL PIPES	ADVANTAGES EMT STEEL PIPES vs. PLASTIC PIPES	ADVANTAGES EMT STEEL PIPES vs. OTHER KINDS OF STEEL CONDUITS (IMC, RSC)
REGULAR INSTALLATIONS	On-wall installations, height < 4 metres	Cable protection against impact	Less expensive Satisfactory protection level Easier installation
	Interior of industrial premises or stocks, height < 4 metres		
	Interior illumination of buildings and offices	Person protection against access to dangerous parts	
	Installations accesibles by hand	Installation protection against environmental influences (e.g. UV radiation)	
PREMISES OPEN TO THE PUBLIC	Open-air installations (exterior)		
	Shopping centres	Person protection against access to dangerous parts	Less expensive Satisfactory protection level Easier installation
	Hospitals and medical practices		
	Cinemas, theatres, museums and auditoriums		
	Nurseries, schools and universities		
	Football stadiums and sports halls		
	Public buildings		
	Conference, congress and trade fair premises		
	Hotels and restaurants		
	Trains, buses and metros		
	Religious sites		
	Airports		
	Premises with occupancy of more than 50 persons		
	Military centres		
Offices with customer traffic			
Fun fairs			
INSTALLATIONS WITH SPECIAL CHARACTERISTICS	Smoke and fire detection systems	High security installations	Less expensive Satisfactory protection level Easier installation
	Security systems and alarms		
	Gas detection systems		
	Smoke extraction systems		
	Supply for fire protection systems and fire engines		
	Emergency systems and lightening		
	Multi-storey car parks		

## Applications and technical calculations

### Application recommendations for TABALSA ARABIA EMT steel pipes

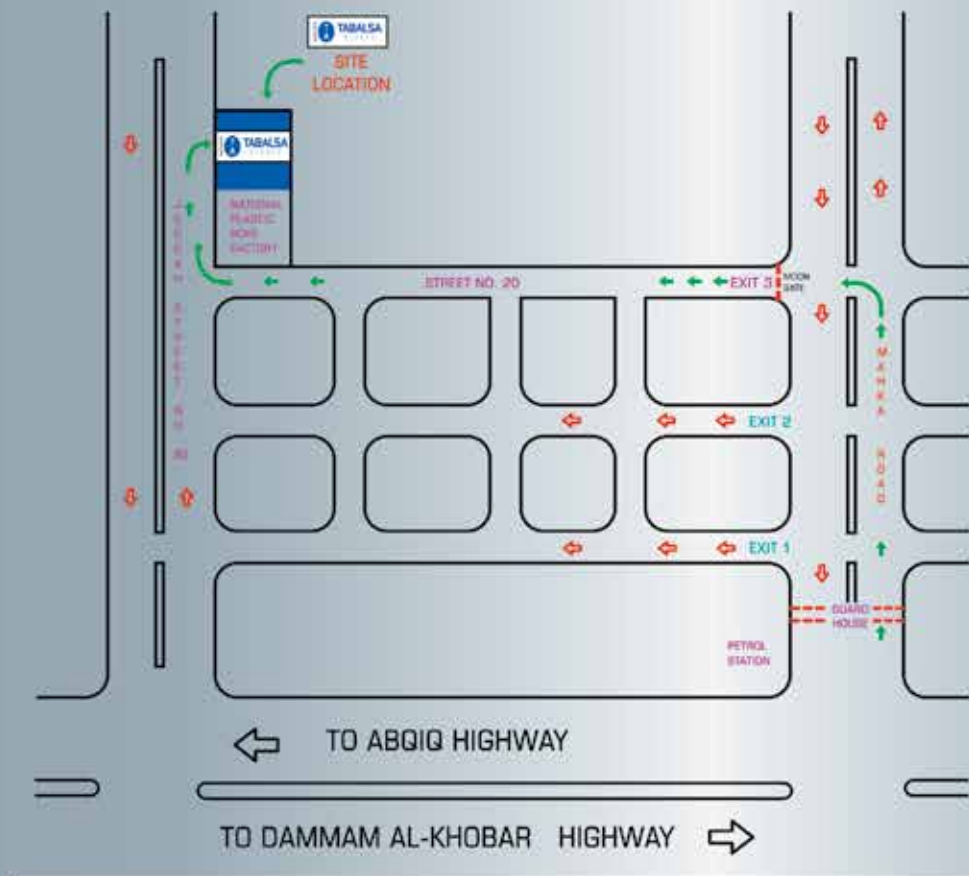
AREA OF SINGLE WIRE CABLE (mm <sup>2</sup> )	RECOMMENDED SIZE OF EMT STEEL PIPE				
	NUMBER OF CABLES				
	1	2	3	4	5
1,5	1/2"	1/2"	1/2"	1/2"	1/2"
2,5	1/2"	1/2"	1/2"	1/2"	3/4"
4	1/2"	1/2"	3/4"	3/4"	3/4"
6	1/2"	3/4"	3/4"	1"	1"
10	1/2"	3/4"	1"	1"	1 1/4"
16	1/2"	3/4"	1"	1 1/4"	1 1/4"
25	3/4"	1"	1 1/4"	1 1/4"	1 1/2"
35	3/4"	1"	1 1/4"	1 1/4"	1 1/2"
50	1"	1 1/4"	1 1/2"	2"	2"
70	1 1/4"	1 1/4"	1 1/2"	2"	2"
95	1 1/4"	2"	2"	-	-
120	1 1/4"	2"	-	-	-
150	2"	-	-	-	-
185	2"	-	-	-	-
240	2"	-	-	-	-

For more than 5 cables or multiple wire cables, the interior area of the pipe has to be at least 2,5 times of the occupied area of the cables



REAL SCALE / SCALE 1:1

EMT	Interior area (mm <sup>2</sup> )
1/2"	190
3/4"	340
1"	540
1 1/4"	960
1 1/2"	1300
2"	2150



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