

# edotco Structure Catalogue



Telecommunication structures have evolved from the highly visible four-legged and three-legged telecommunication towers, to monopoles and rapid poles that today, seamlessly blend into their surroundings. At edotco, we serve to meet that growing, modern-day demand for tower infrastructure and expertise. With a comprehensive selection of custom engineered towers featuring durable aesthetic designs, we offer you complete and highly optimised solutions. We are constantly striving to fuel communication innovation with unrivalled connectivity, flexibility and environmentally conscious solutions for tomorrow's communication.









Feature	<ul> <li>Lattice configuration</li> <li>3 legged structure</li> <li>Leg and bracing consist of pipe (CHS) sections</li> <li>Macro coverage requirements</li> </ul>
Space Size	7m x 7m
Height Range	30m – 50m
Number of Tenants	3 tenants
Site Location	Sekinchan, Selangor, Malaysia



## 4 Legged Angular Tower

Feature	<ul> <li>Lattice configuration</li> <li>4 legged structure</li> <li>Leg and bracing consist of angular section</li> <li>Suitable for Hub or collector sites - higher capacity requirements</li> <li>Macro coverage requirements</li> </ul>
Space Size	10m x 10m
Height Range	50m – 100m
Number of Tenants	5 tenants
Site Location	Jenderam, Selangor, Malaysia
	* Hub / Collector site — Site that serves as a transmission link aggregator



#### Monopole

Feature	<ul> <li>Hollow tubular or polygonal tubes with decreasing diameters</li> <li>Flange joint or slip in joint assembly</li> <li>Slim design</li> <li>High load capacity</li> <li>Coverage in urban areas</li> </ul>
Space Size	6m x 6m
Height Range	20m – 45m
Number of Tenants	3 to 4 tenants
Site Location	Bengkel MARA Keramat, Kuala Lumpur, Malaysia

#### WIDE COVERAGE

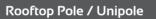
edotco's tower sharing concept suits the growing needs of our customers by providing quick market coverage with optimal network facilities.





## Rooftop Tower

Feature	<ul> <li>Lattice configuration</li> <li>4 legged structures</li> <li>Leg and bracing consist of pipe (CHS) or angular section</li> <li>The base width is of minimum dimension since the structure is roof mounted</li> <li>The base of the tower is mounted on concrete or steel frame (consists of I-beams or inverted I-beams) with the frame fixed on the rooftop existing concrete columns/ pedestal</li> <li>Macro coverage requirements</li> </ul>
Height Range	12m – 20m
Number of Tenants	3 tenants
Site Location	Kafrul, Dhaka, Bangladesh



reature	<ul> <li>Pipes in circular or multisided configuration with minimum thickness of 4mm</li> <li>Flange joint or slip in joint assembly</li> <li>Slim design</li> <li>Single roof mounted poles fixed with steel dowels drilled into the roof</li> <li>Coverage in urban areas</li> </ul>
Height Range	6m – 12m
Number of Tenants	2 tenants
Site Location	Gombak Setia, Kuala Lumpur, Malaysia



## Rooftop Mast / Minimast

Feature	<ul> <li>Lattice configuration</li> <li>3 legged or 4 legged structures</li> <li>Leg and bracing consist of pipe (CHS) or angular section</li> <li>The base width is of minimum dimension since the structure is roof mounted</li> <li>The base of the tower is mounted on concrete or steel frame (consists of I-beams or inverted I-beams) and the frame fixed with the roof existing concrete columns/ pedestal</li> </ul>
Height Range	6m – 15m
Number of Tenants	2 tenants
Site Location	Taman Klang Utama, Malaysia

#### COMPREHENSIVE SOLUTIONS

A diverse array of towers, with locations and heights to fit all coverage needs.





Special Structures



## Aesthetic Monopole

Feature	<ul> <li>Hollow tubular or polygonal tubes with decreasing diameters</li> <li>Flange joint or slip in joint assembly</li> <li>Slim design</li> <li>Concealed as a tree</li> <li>Reduced visual impact to the environment</li> <li>Coverage in urban areas</li> </ul>
Space Size	6m x 6m
Height Range	20m – 45m
Number of Tenants	3 tenants
Site Location	Cyberjaya, Selangor, Malaysia



## Lamp Pole

Feature	<ul> <li>Hollow tubular or polygonal tubes with decreasing diameters</li> <li>Flange joint or slip in joint assembly</li> <li>Slim design</li> <li>Concealed as light poles</li> <li>Compact, light-weight structure with high strength and small wind resistance</li> <li>Reduced visual impact to the environment</li> <li>Coverage at street level</li> </ul>
Space Size	6m x 6m
Height Range	16m – 30m
Number of Tenants	3 tenants
Site Location	Jalan Parlimen, Kuala Lumpur, Malaysia



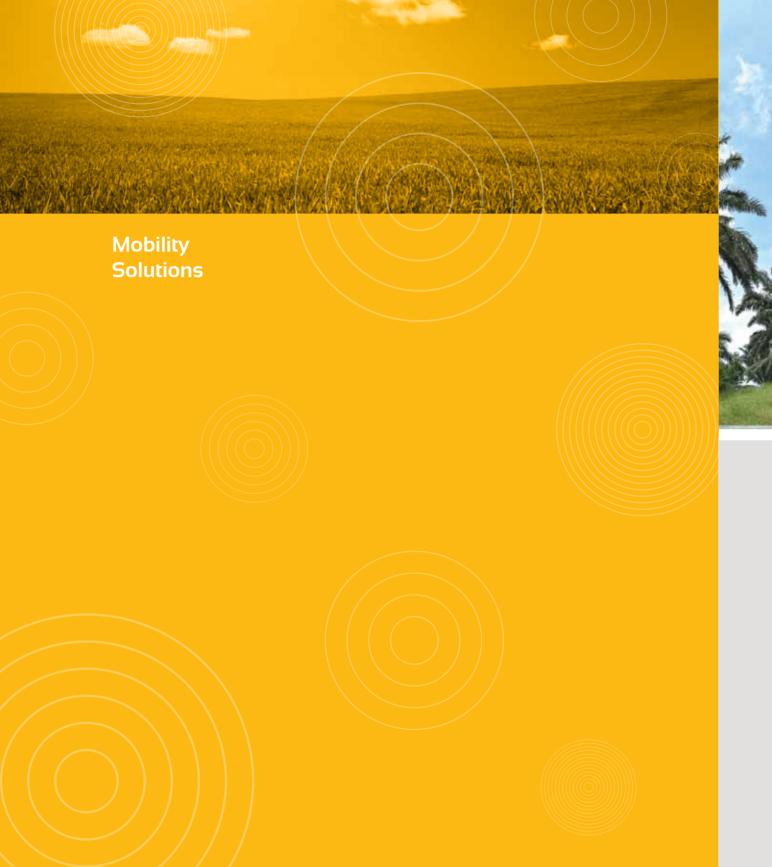
## Rapid Assembly Pole (Rapole)

Feature	<ul> <li>Hollow tubular or polygonal tubes with decreasing diameters</li> <li>Flange joint or slip in joint assembly</li> <li>Slim design</li> <li>Compact, light-weight structure with high strength and small wind resistance</li> <li>Mobile structure with rapid deployment</li> <li>Relocatable once permanent structure is ready</li> <li>Foundation plates (I-beams) can be moved with structure</li> <li>Coverage in urban areas</li> </ul>
Space Size	6m x 6m
Height Range	15m – 30m
Number of Tenants	3 tenants
Site Location	Surau Al-Ikhwan, Puncak Perdana, Kuala Lumpur, Malaysia

#### INNOVATIVE

Creative solutions optimised for ease of installation and minimum interference with existing mounts and lines.







# edotco Mobility Solution

Feature	<ul> <li>Coverage during natural disaster / special events</li> <li>Comes with 15m Telescopic mast</li> <li>Telco to install nodeB and RRU only – Plug and Play</li> <li>Transported to site via 4W Drive</li> </ul>
Space Size	One carpark space
Number of Tenants	3 tenants
Site Location	Cyberjaya, Selangor, Malaysia

#### GEOGRAPHICALLY SOUND

edotco towers are strategically located in high density geographies with capacity for co-location with minimal incremental capex.







#### Camouflage using FRP Material

Feature	<ul> <li>Telco equipment concealed with Fibre Reinforced Panels (FRP)</li> <li>Camouflage design can be customised to blend with the environment</li> <li>Appealing to local community</li> <li>Coverage requirement at public areas / street level</li> <li>Attractive branding option</li> </ul>
Number of Tenants	2 to 3 tenants
Site Location	Boat Club, Dhaka, Bangladesh





#### **Pylon Solutions**

Feature	<ul> <li>Telco equipment concealed with Fibre Reinforced Panels (FRP)</li> <li>Attractive branding option via partnership with petrol stations, shopping malls, etc.</li> <li>Appealing to local community</li> <li>Coverage requirement at public areas / street level</li> </ul>

Number of Tenants 2 - 3 tenants

Site Location

SHELL Intan Baiduri, Kepong, Malaysia



#### Camouflage using Common Antenna System (CAS)

Feature	<ul> <li>Usage of Common Antenna System (CAS) reduces the clutter of individual antennas that are typically deployed</li> <li>Can also be deployed on monopole / Lamp Pole structures</li> <li>Appealing to local community</li> <li>Coverage requirement at public areas</li> </ul>
Number of Tenants	2 to 3 tenants
Site Location	Desa Park City, Kuala Lumpur, Malaysia

#### edotco Camouflage Solutions on Existing Infra



Minaret
Site Location:
Masjid Jamiul Ehsan,
Kuala Lumpur, Malaysia

Road Signage Site Location: Bukit Tunku, Kuala Lumpur, Malaysia

\* Leveraging on infra for enhanced coverage and capacity to blend in with surroundings

#### COMPLETE & HIGHLY OPTIMISED SOLUTIONS

Providing tower structure solutions that include traditional structures and custom made towers to meet customer's requirements.







#### Carbon Fibre Structure

Feature	<ul> <li>Round lattice matrix of carbon fiber strands layered in a geometric pattern</li> <li>The matrix is then covered with a flat sheet of carbon fiber to form a pole section</li> <li>Slip in joint assembly</li> <li>Compact, light-weight structure with high strength</li> <li>Ideal to be installed as rooftop poles given its light weight (70% lighter than steel)</li> <li>Aesthetically appealing</li> <li>Coverage at urban area</li> </ul>
Space Size	6m x 6m
Height Range	15m - 24m
Number of Tenants	3 tenants
Site Location	Technical Morh, Dhaka, Bangladesh

#### TOWER FLEXIBILITY

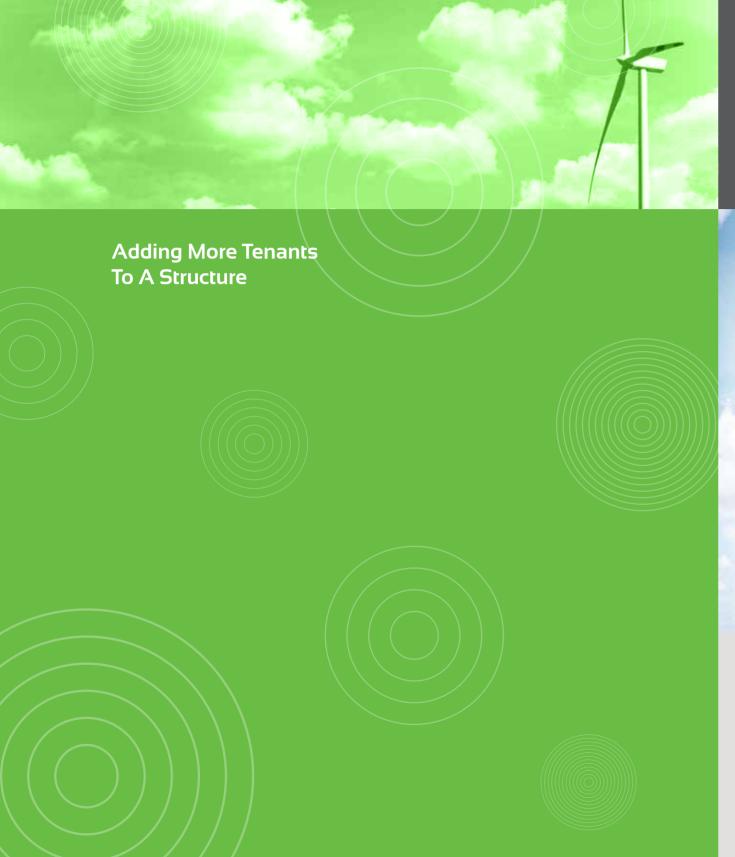
Our towers are designed and custom engineered to blend seamlessly with the landscape and surrounding environment.



#### Bamboo Structure

Feature	<ul> <li>4 legged bamboo truss pole</li> <li>Lattice configuration</li> <li>Manufactured from locally available bamboo raw material with steel joint bracings</li> <li>Ideal to be installed at rooftop sites given its light weight</li> <li>Coverage at urban areas</li> <li>Aesthetically appealing</li> </ul>
Height Range	6m – 9m
Number of Tenants	2 tenants
Site Location	Uttara, Dhaka, Bangladesh.





## Adding Tenants



Additional Platform Site Location: ERL Salak Tinggi, Malaysia

Additional Rings Site Location: Surau Al-Iman, Dengkil, Malaysia

Extended Structure
Site Location:
Taman Bunga Raya,
Setapak, Malaysia



#### Overview of edotco Structure Specifications

- The structures are designed in accordance to BS 5950, BS 6399, BS 8110, BS 8100 or TIA-222-G specifications
- Galvanizing is accordance with ASTM and BS codes with average coating thickness for steel members shall not be less than 85 micron (610 g/m2)
- The structures are fitted with lightning rods at the top long enough to give a 45° cone of protection over all antenna
- Aircraft Obstruction Lightning is accordance with ICAO (International Civil Aviation Organization's)
- Painting is accordance with ICAO (International Civil Aviation Organization's) regulations
- Structures modeling and analysis are done using MS Tower and/or Staad Pro software

#### DISCLAIMER

Certain tower designs may only be readily available in some countries, please contact edotco for more details

