

SPACE FRAME

DESIGN STATEMENT.....CES Space frame system, 3-dimensional frame structures, As we stand at the doorway of the next millenium it will be apparent to architects possessing both artistic courage and scientific expertise that today's culture has be expressed in the means and ways of today. In that respect CES space frame system is the very best that contemporary technology has to offer. Combining unsurpassed elegance and outstanding structural integrity CES is the ultimate synthesis of architecture and engineering.

With a capacity to permit spatial load bearing mechanisms of virtually infinite geometric complexity the system offers itself as a powerful design tool for those creative consultants with a philosophy encompassing architectural honesty.

ENGINEERING STANDARD.....The component of CES space frame manufactured from high tensile alloy steel is standard material of CES space frame and other standard is also available on your request.

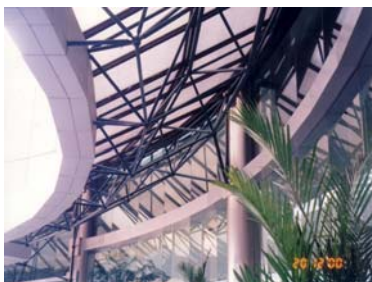
Controlled forging of nodes, cones, sleeves and fasteners produce continuous symmetric grain flows which follow the major stress paths thus ensuring excellent structural performances from all critical componentry.

STANDARD COMPONENT SIZE

Following is the standard component size of CES SPACE FRAME.

COMPONENT	STANDARD SIZE
NODES (DIA.)	N50, N70, N85, N110, N120, N150, N200, N250, N300
CONES (DIA.)	C42, C48, C60, C76, C89, C101, C114, C139, C165, C216, C319, C355
BOLTS	M12, M14, M16, M20, M24, M30, M36, M42, M48, M52, M60
SLEEVES	S12, S14, S16, S20, S24, S30, S36, S42, S48, S52, S60
TUBES	T42, T48, T60, T76, T89, T101, T114, T139, T165, T216, T319, T355
SQUARE TUBES	SQ38, SQ50, SQ75, SQ100, SQ125, SQ150, SQ175, SQ200

FRONT CANOPY CONES SHAPE



BRIDGE VIEW HOTEL

Area 500 Sqm.
 Year of installation...1995
 Material Steel hot dip galvanized
 Finish Powder coated
 Finish 10mm. Polycarbonate

SURFACE COATING.....CES Space frame to protect the integrity of the system for a lifetime of service CES members are hot dipped galvanised, both inside and outside, following fabrication processes.

The virtual elimination of moisture traps between adjacent components at the joint also eliminates interface corrosion, a major and largely unsolvable problem for systems presenting a multitude of inaccessible surfaces.

Fasteners are manufactured to aerospace standards and protected by tin/cadmium alloy applied by the glass bead cold fusion process, producing unprecedented longevity in even the most aggressive environments.

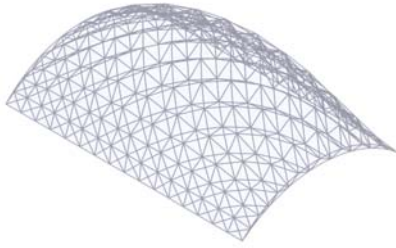
Paint finish applications are the subject of ongoing development in line with new materials and processes. Current high performance architectural paint finishes include baked polyester and two-pack polyurethane, applied under strict quality control in dedicated paint plants.

APPLICATIONS.....As innovative steel structures become a feature of the modern Architect's sophisticated design approach, so the demand grows for properly executed engineering and fabrication to fulfill the intentions of the designer.

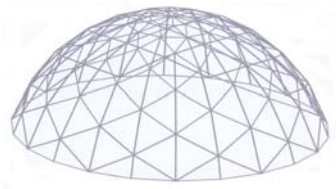
To realize this requires a collaboration between designer and engineer. At CES FRAME we believe that space frame can be structure and also sculpture.

We have the experience, technology and analytical power to give contemporary lightweight expression to articulated steelwork.

CES FRAME COMPANY LIMITED. We truly believe that less is more.



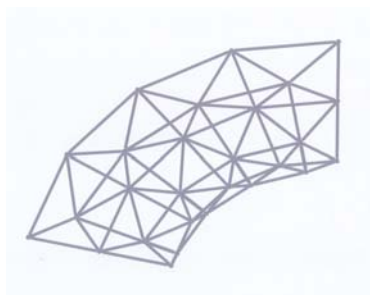
STRUCTURAL Turtles CURVE



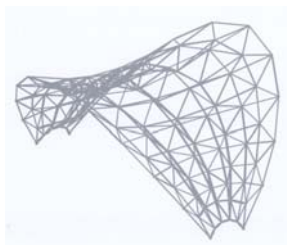
DOMe



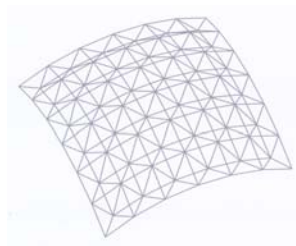
CYLINDRICAL ARCH



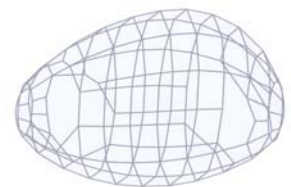
CONE



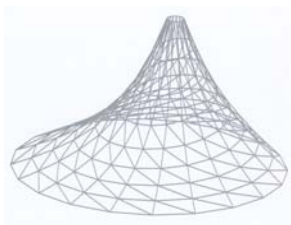
FREE FORM



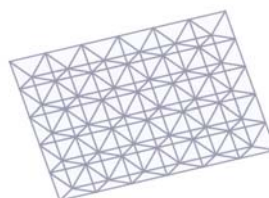
CURVE FORM



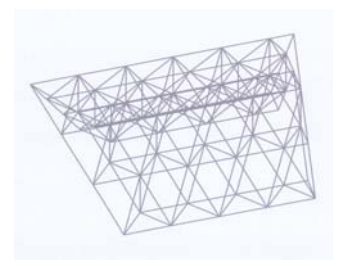
FREE FORM



FREE FORM



PLANAR GRID



PYRAMID TRIANGULAR TYPE

SPACE FRAME GEOMETRY

There are many possible of space frame geometries,

The Space frames structural system is an affordable means of achieving visually impressive structural arrangements that provide conspicuous and unique appeal in many different ways to all buildings.

There is virtually no limit to the geometrical arrangements that are possible. Some of the common forms that Space frames supplies include: Domes, Spheres, Cones, Prisms, Ovaloids, Toroids, Arches, Cylinders, Ellipses, Pyramids, Hypars, Cantilevered, Suspended, Inclined Structures, Multiple Curvatures and Free-form Shapes, Theme/Exhibition/Display structures, Stars, Fish, Turtles

SAPCE FRAME REQUIRED INFORMATION FOR DESIGN

- Geometry including space frame span, module size and depth.
- Appearance of space frame truss.
- Load conditions-live load, dead load, wind load, seismic load, snow load and construction load.
- The standard and code to be applied to the project. (ASTM, JIS, DIN, BS, or others.
- Roof covering material.

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Space frame design pyramid triangular type

Area 100 Sqm.

Year of installation...2005

Material Steel electro galvanized and powder coated finish

Roof 12mm. Glass

OTHER FINISH

CES SPACE FRAME Can provided other standard is also available on you request.

FINISH: Unless otherwise is demanded, bolts and spheres are plated by electro galvanization and the nuts are plated by hot dipping or electro galvanization. For the pipes, the following methods are used as desired:

- a) Epoxy polyester powder paint on zinc phosphate,
- b) Polyester powder paint on zinc phosphate,
- c) Epoxy polyester powder paint on hot dipped galvanization,
- d) Polyester powder paint on hot dipped galvanization,
- e) Chrome plated,
- f) Hot dip Galvanized,
- g) Electro Galvanized,
- h) Wet paint,
- c) Polyester powder coated,

STAINLESS STEEL SPACE FRAME

Stainless steel MAT'L

: SUS 304 or 304L

: SUS 316 or 316L

ALUMINUM SPACE FRAME

Aluminum MAT'L

: Member-Extruded aluminum alloy (6064 T4)

: Connector/nodes-spherical entrusions of aluminum alloy (6061 T4)

Aluminum finish can be anodized finish kynar 500 finish or powder coat finish



 **CES FRAME**
www.cesframe.com