

# SKYDOME

## PARKING

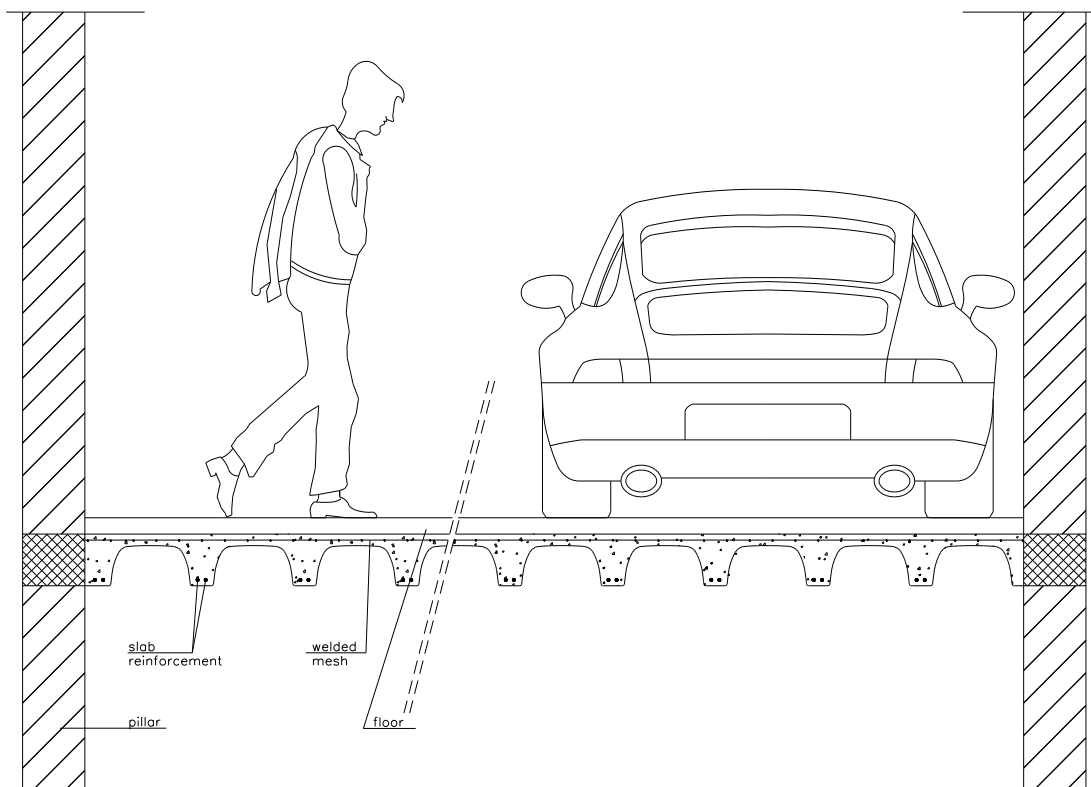
### Sistema Skydome

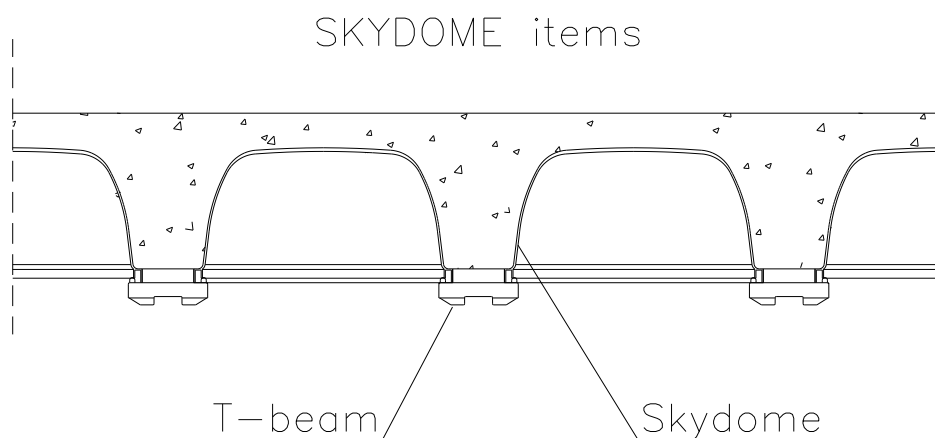
SKYDOME is a formwork for two-way ribbed slabs (waffle slabs). This arrangement gives great structural advantages for both static and dynamic loads thanks to the reduced self-weight and to the curved cross-section of the ribbing.

The waffle slab formed is suitable for parking structures as it supports dynamic loads on large spans, while complying to the specified fire resistance values.

### Advantages

- Reduction of the slab's self weight
- Better seismic behaviour
- Decreased load on the foundation
- Smaller size of the perimeter beams
- Better load distribution on the columns, which can be decreased in size
- Creation of two-way ribbing with variable cross-section
- Smooth finish, concrete can be left in sight as-is





### GENERAL DETAILS

| Max slab span | T-beam Width | h of Skydome | h of r.c. cover | total h of slab |
|---------------|--------------|--------------|-----------------|-----------------|
| [ft]          | (L1) [in]    | [in]         | (H1) [in]       | (H2) [in]       |
| 22.96         | 6.23         | 11.81        | 1.96            | 13.78           |
| 26.24         | 7.87         | 11.81        | 1.96            | 13.78           |
| 29.52         | 4.72         | 15.74        | 1.96            | 17.71           |
| 32.80         | 7.87         | 15.74        | 1.96            | 17.71           |

\*refers to a square plan with beam reinforced with 0.622 [sqin]

| Cost advantages  | Job-site advantages   |
|--|---|
| <ul style="list-style-type: none"> <li>• Lower quantity of steel</li> <li>• Less concrete vs. an equivalent full concrete slab</li> <li>• Cost effective logistics and easy storage</li> <li>• Initial investment amortised after few pours</li> </ul> | <ul style="list-style-type: none"> <li>• Fast and easy to erect</li> <li>• Load-bearing before the pour, can be installed from below</li> <li>• As plastic does not stick to concrete, stripping is easy and does not require releasing agents</li> </ul> |