

PRACTICABLE METAL GRID

Metal grid, carried out with metal staves of 6x10 cm, installed every 6 cm, welded to the underlying structure of HEB 140 beams.

The supply could be completed by a trapdoor for the lifting of the operation ropes and of the stage elements necessary on the grid level.

This trapdoor will be made with the same elements of the staves, dim 2x1, complete with railings that can be dismantled when the trapdoor is closed.

Supply and installation of staves forming the practicable grid.

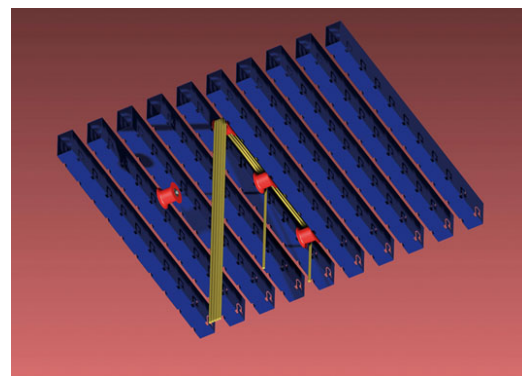
The grid, fundamental element of the theatre, is foreseen to be the foothold of all upper stage elements necessary for the stage during the performance.

Above the main frame, with a distance between them of about 12 cm, are installed some rows of staves, made of rolled steel tubular (Fe 360), stove enamelled with epoxy powders, of the chosen colour, 2 mm section, dim. 60x100 mm h., of rectangular section closed with special lateral eyelets, in order to allow a quick and safe insertion of the reels and of the pulleys.

The stave rows proposed step is of 60 mm and 60 mm for the stage slots for the ropes descent, for a total of 95 available stage cuts (many more than for the traditional type of metal staves).

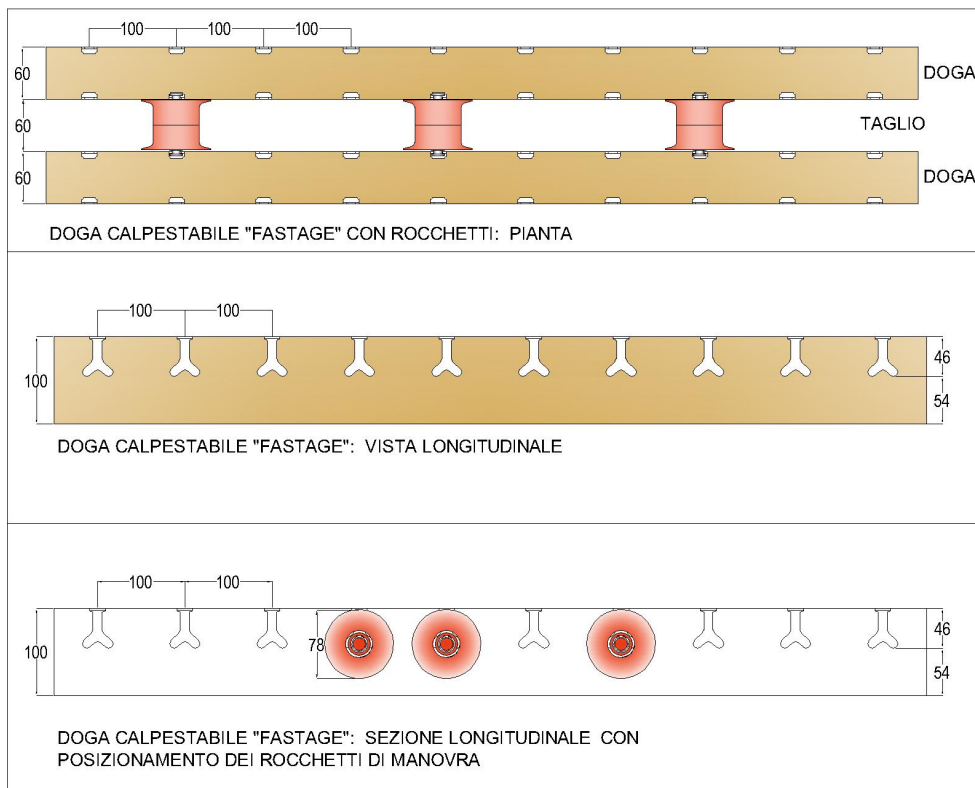
The eyelets holes, made on the two long sides of the staves, every 10 cm, are set in such a way to avoid the coming out of the reels and the pulleys and allow their complete rollaway insertion, so that the practicable grid floor stays completely free from ropes.

Between one stave and the other there will be a 6 cm slot, that will be used for the insertion of the reels and the pulleys necessary for the rigging organization.



Advantages of this type of grid compared with a traditional metal grid

- as the reel is completely embedded into the staves slot, the grid floor will stay completely free from any obstacle:
- there are not reel carrying brackets
- the hemp and steel ropes will always run inside the slot
- As the width between the staves is of 120 mm, it will be possible to have at least 25% more slots if compared with the traditional solution.



Trapdoor

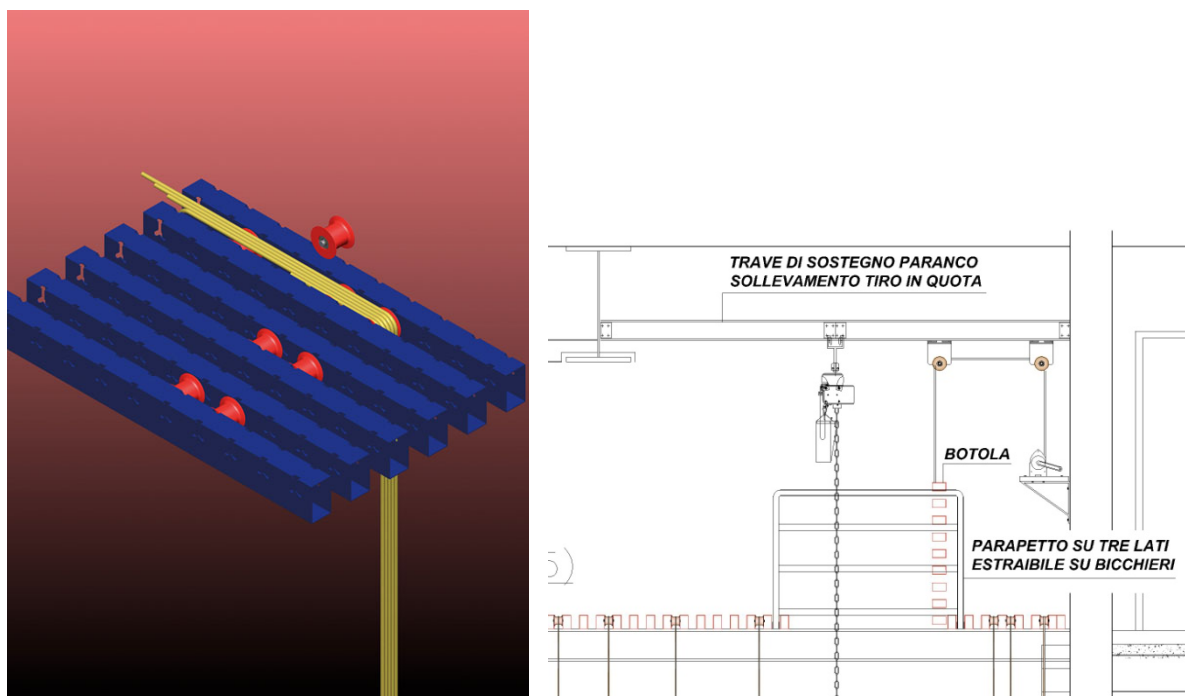
Trapdoor, dimensions 2,00x1,00 m about, carried out with the same grid stave sections, to be placed in a suitable position, across two supporting beams of the grid.

The trapdoor will be carried out by joining the liftable staves with two metal staves of suitable dimensions underneath. The closing part of the trapdoor, when closed, will be part of the grid floor, and will act as the fourth protection railing when opened (90°).

The opening will be possible thanks to suitable hinges installed on the fixed part and through a positioning block at 90°.

The opened trapdoor will be completed with 3 other safety railings, dismantlable, one of these being a gate .

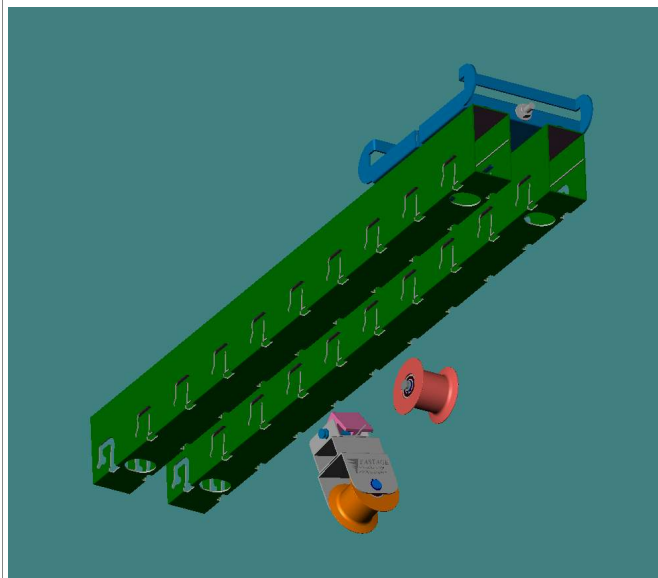
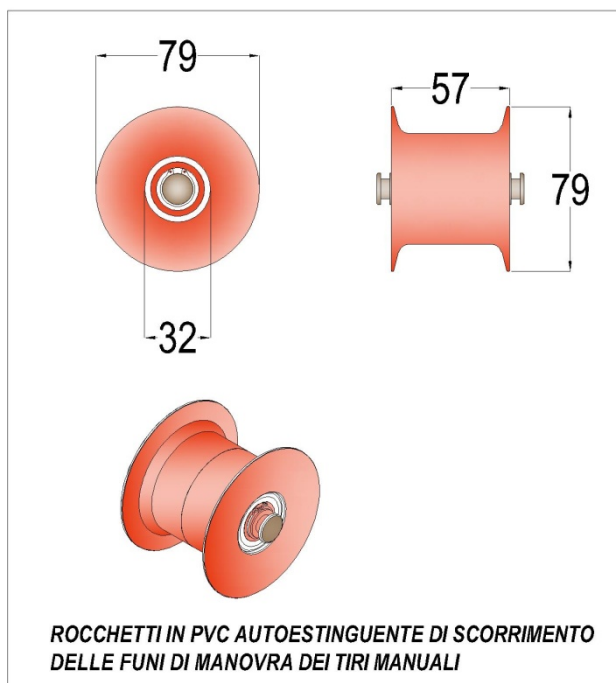
The railings will be made with 42 mm metal tubulars, shaped and stove enamelled in the same colour of grid.



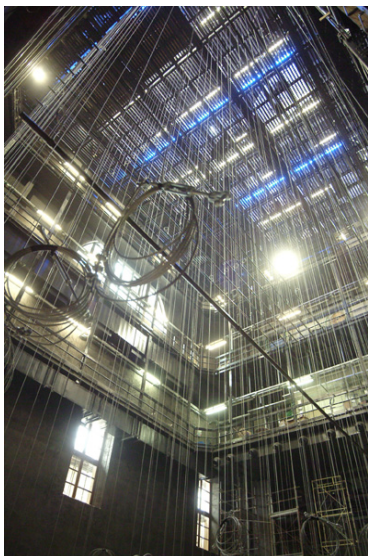
SINGLE AND DOUBLE REELS, HEMP ROPES AND BARS

Standard equipment complete of mobile reels for manual hoists, 5000 m hemp ropes, diam 8 and 10 mm with suitable ultimate strength, and 20 pcs aluminium tubular modular bars, each 12 m long.

- Necessary single and double mobile reels, in relation with the total quantity of rigging sets, constructed with fire retardant PVC, section 89x49x44, with double ball bearings, rotating metal pin, metal pin for quick insertion, placed laterally, for the insertion of the reel in the grid staves, inside the cut, so that the grid plan is kept clear.



- Hemp rope, diameter 8 and 10 mm, with 3 strands, certified for an ultimate strength of 5.4 kN, suitable for the movement of the rigging sets.
- Load bar of aluminium tubular diam. 50 mm of suitable length, made with first rate material, aluminium section UNI 50x2 mm, EN AW-6060 alloy, complete with ABS shock absorbent end caps.
Included modular insertions for lengthening/shortening of the load bar (every 4 meters).



Ricostruzione Teatro La Fenice Venezia
Foto Michele Crosera



SUPPORTING BARS

Supporting bars for fly floors and/or side walls, installed at 1 meter from stage floor, total development to be defined.

The bars will be constructed with metal insertion and brackets and outer element of solid fir wood, 10x120 cm about of rectangular section and bevelled edges.

Round tubular element 60 mm diam, installed below, for the fixing of the remaining rope.

Varnishing of the metal parts with epoxy powders, stove enamelled, colour to be chosen. Installed with wall or floor connection with steel uprights every meter about, complete with suitable plate and fixings through chemical anchors.

