

JIBBI 1250 EVO



Point loading and Traffic
load

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Traffic load in transient

Traffic loads in transit per m² are based on machine length x basket width, the traffic load results:

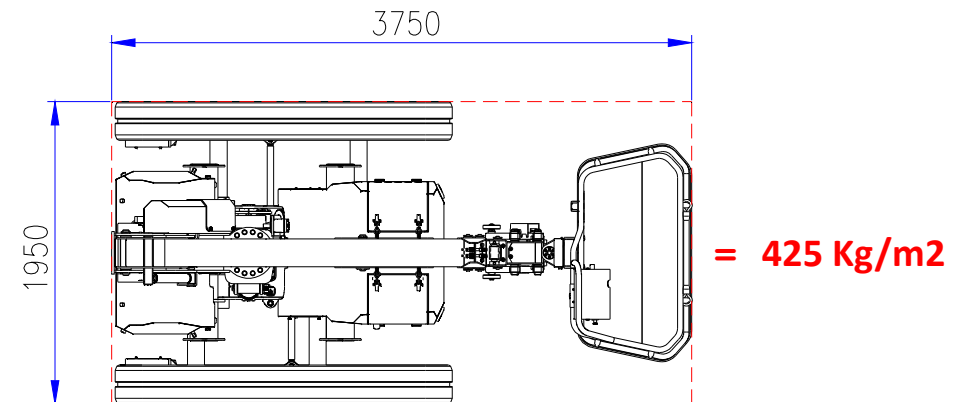
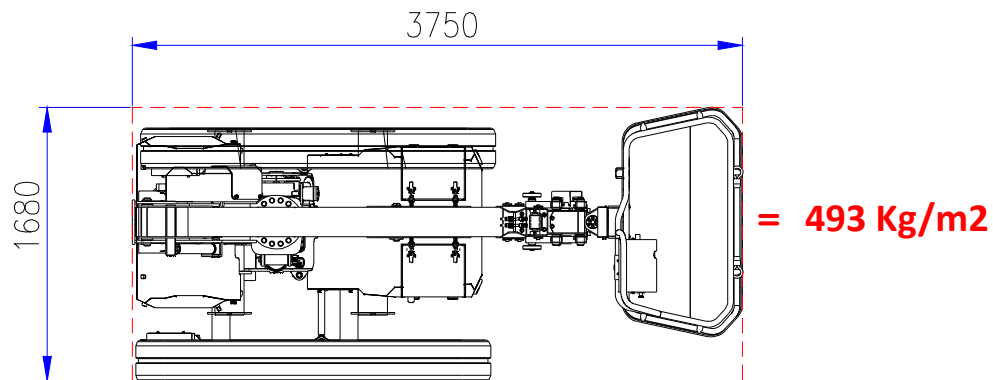
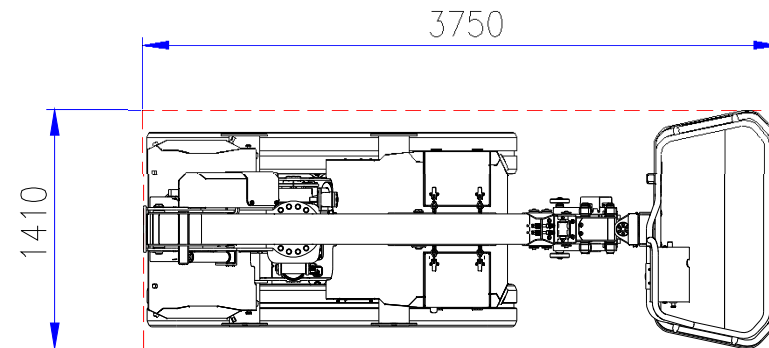
Dead weight of version = 2.880Kg

Rated load = 230Kg / Total load = 3.110Kg

Area occupied by machine = 3,75 x 1,41 = 5,2875 m²

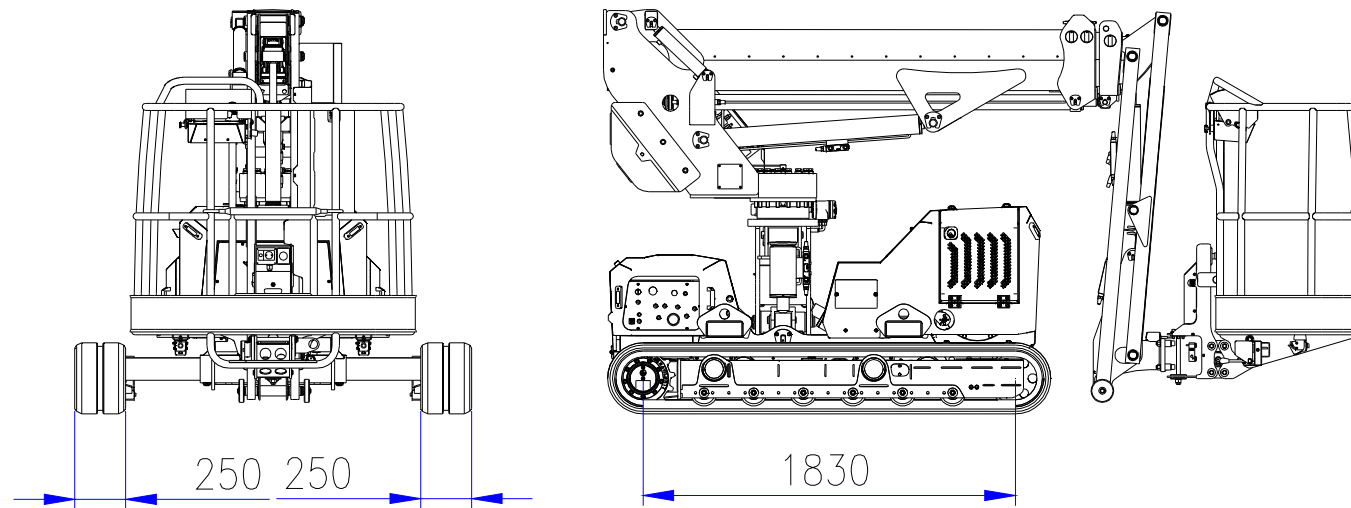
Traffic load in transient = 3.110 / 5,2875 = **588 Kg/m²**

In order to reduce this load at a value less than 500Kg/m² it is necessary extend completely one or two crawlers



Point loading tracks (Average force with full contact area)

The average distributed load on the full contact area of the crawlers,
is calculated as the ratio between the dead weight plus the rated load
and the contact area of the crawlers:



Dead weight of version = 2.880Kg

Rated load = 230Kg / Total load = 3.110Kg

Contact area = $2 \times 25 \times 183 = 9.150 \text{ cm}^2$

Distributed load on tracks = $3.110 / 9.150 = 0,34 \text{ Kg/cm}^2 = 3,33\text{N/cm}^2$

Point loading tracks (Average force with minimum contact area)

The average distributed load on the minimum contact area of the crawlers is calculated with the machine in working condition.

A rated load is considered located in basket.

The basket and the boom are considered in the most critical configuration

Wind actions and inertia forces are also considered.

The real contact area between the tracks and the floor is considered.

Dead weight of version = 2.880Kg

Rated load = 230Kg

Inertia forces = 110Kg

Total load = 3.220Kg

Maximum load on contact area A = 2080Kg = 20,4kN

Contact area = 25 x 46 = 1150 cm²

Distributed load on contact area = $2080 / 1150 = 1,8 \text{ Kg/cm}^2 = 17,7 \text{ N/cm}^2$

