



Présentation des notes de calcul mécanique  
Exemple d'un shelter DATA CENTER de 12 x 3 m

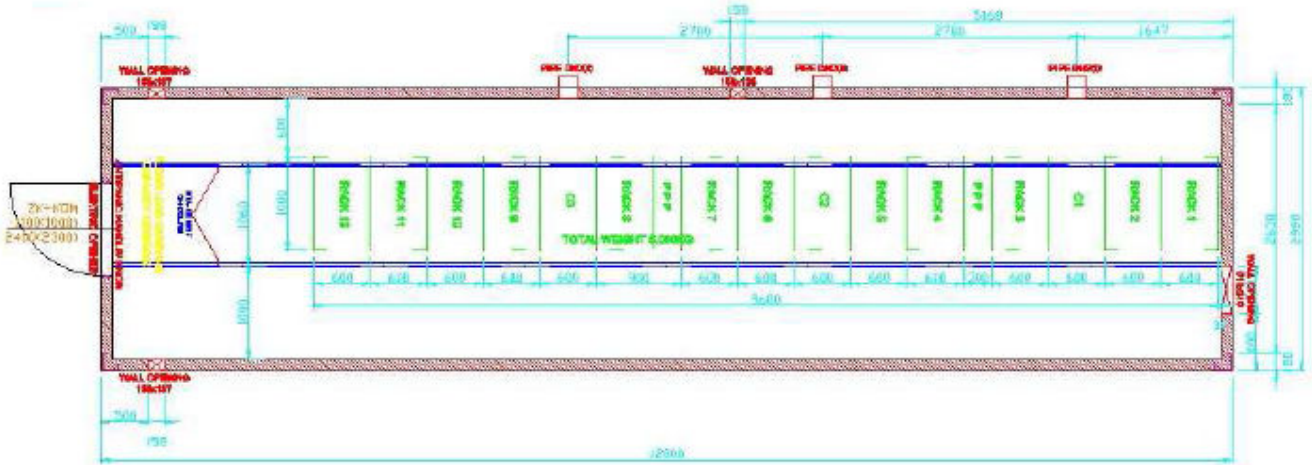


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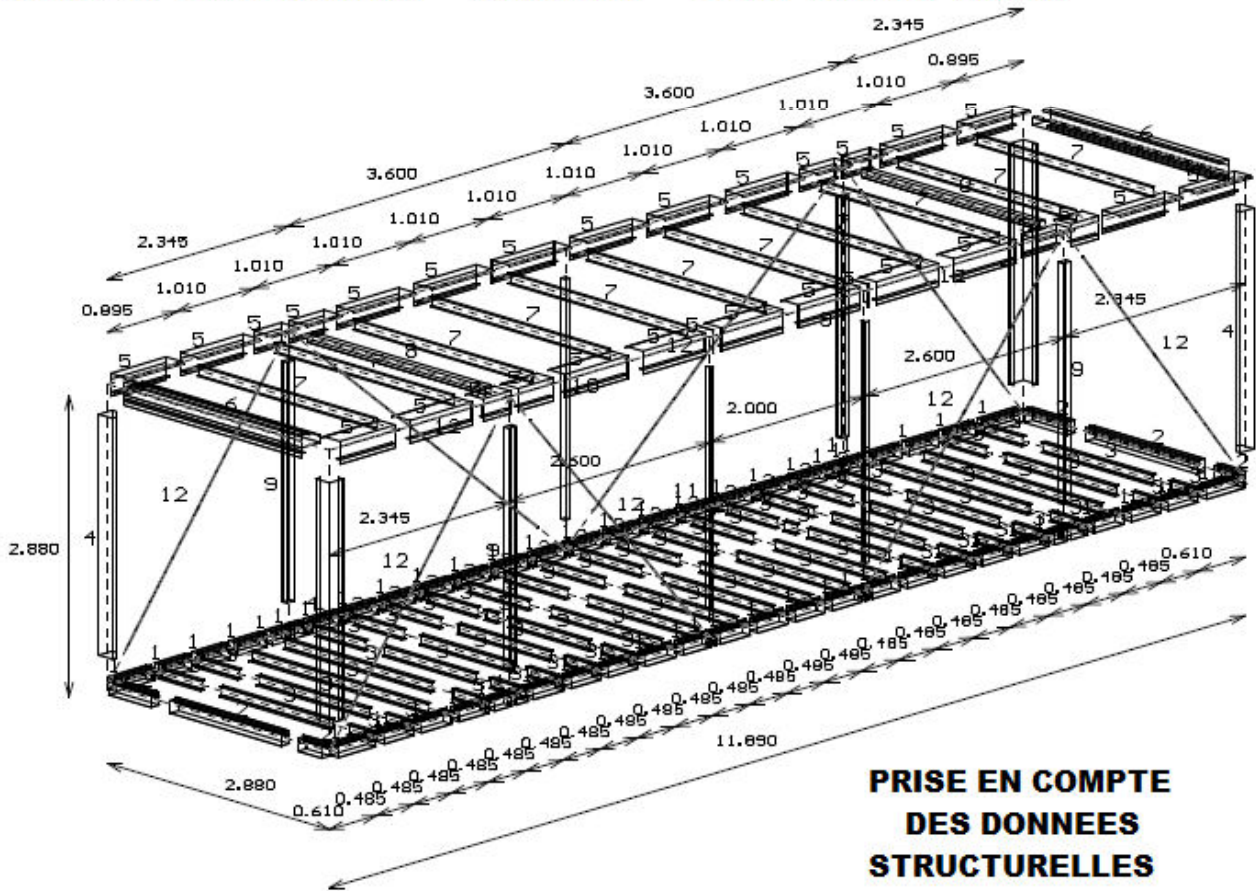


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CONTAINER - STRESS ANALYSIS

ROSTER OF THE CONTAINER - DIMENSION - CROSS SECTION NUMBER



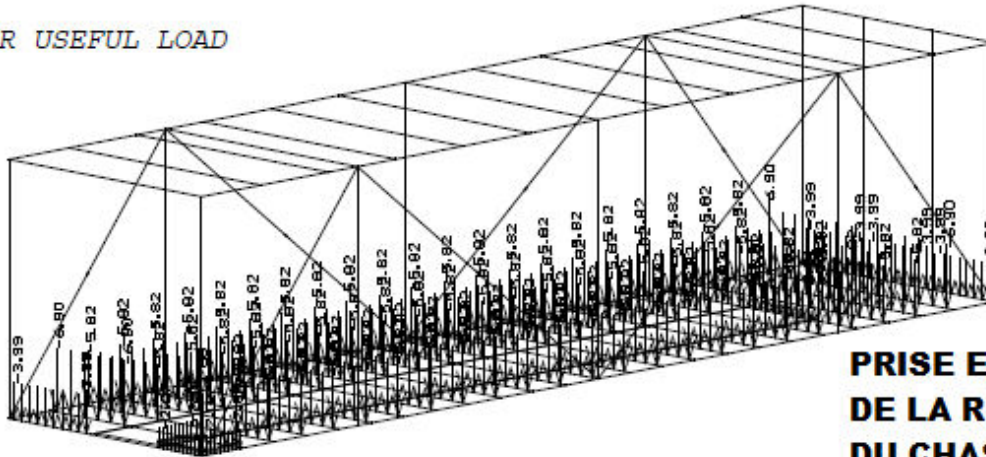
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CONTAINER - STRESS ANALYSIS

L 3 FLOOR USEFUL LOAD  
[kN/m<sup>2</sup>]

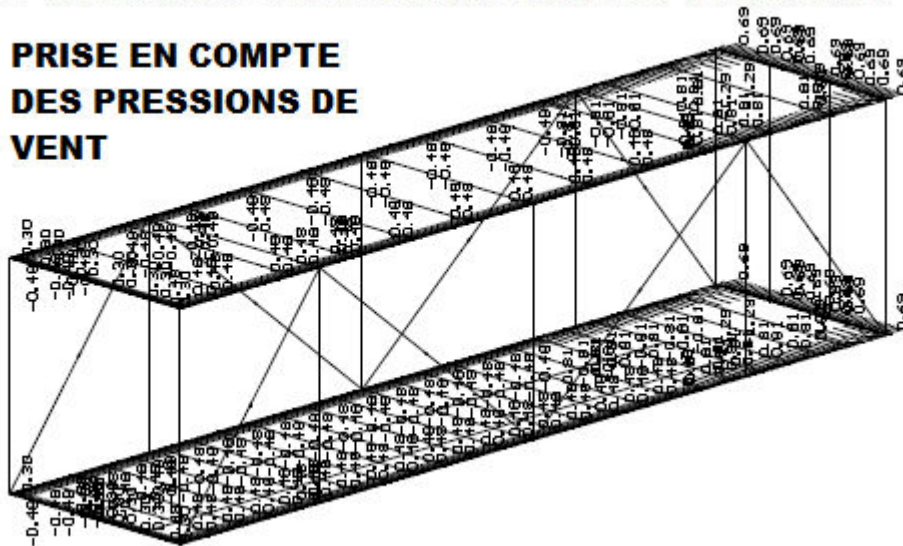


**PRISE EN COMPTE  
DE LA RESISTANCE  
DU CHASSIS**

CONTAINER - STRESS ANALYSIS

L 5 WIND LOAD IN PREMISES LONGITUDINAL DIRECTION " +W(L, WAND) "  
[kN/m<sup>2</sup>]

**PRISE EN COMPTE  
DES PRESSIONS DE  
VENT**

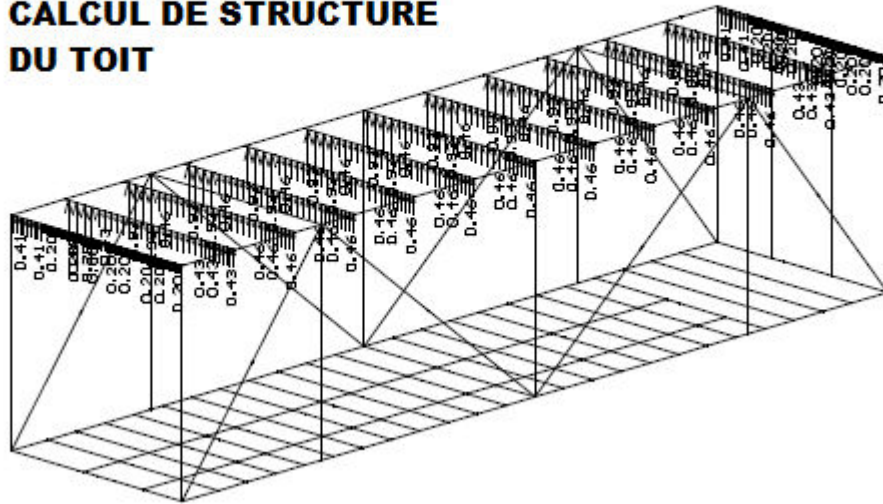


CONTAINER - STRESS ANALYSIS

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L 15 WIND DRAWS ON PREMISES ROOF CROSS DIRECTION „+W(Q,DACH\_2)“  
[kN/m<sup>2</sup>]

**CALCUL DE STRUCTURE  
DU TOIT**



CONTAINER - STRESS ANALYSIS

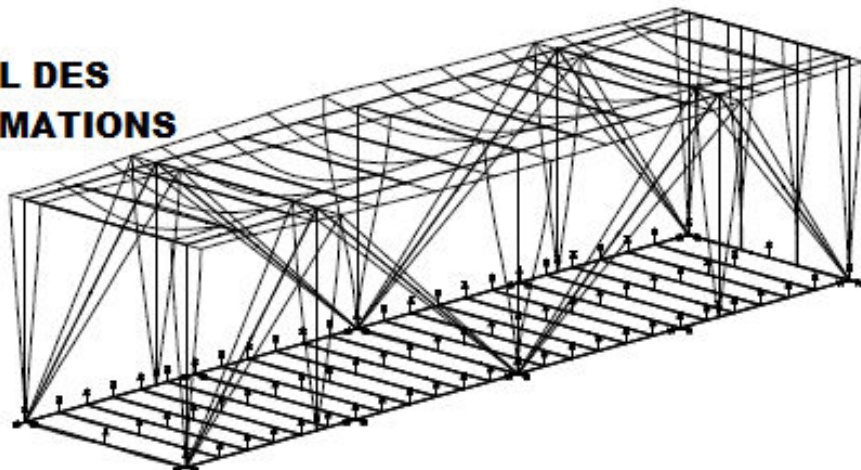
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RESULTING VALUES - DEFORMATION F :

[m]

F (max) :

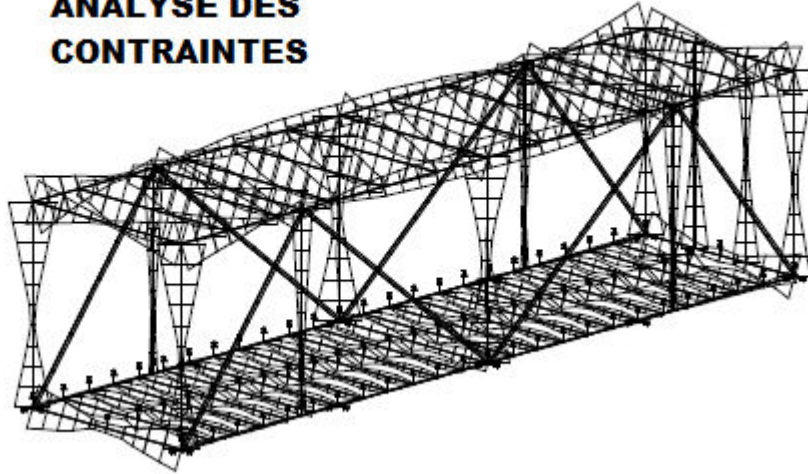
**CALCUL DES  
DEFORMATIONS**



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*RESULTING VALUES - STRESS :*  
[kPa]

**ANALYSE DES  
CONTRAINTES**

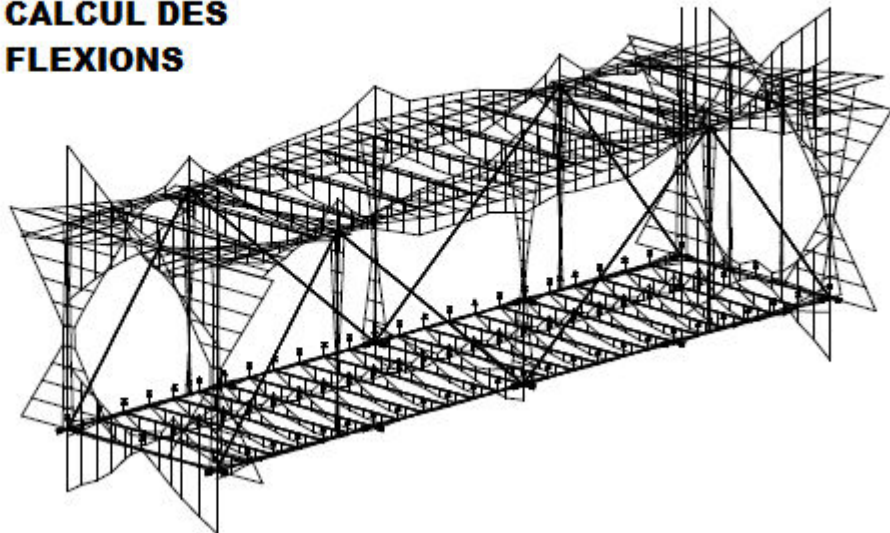


CONTAINER - STRESS ANALYSIS

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*RESULTING VALUES - BENDING MOMENT :*  
[kN . m]

**CALCUL DES  
FLEXIONS**

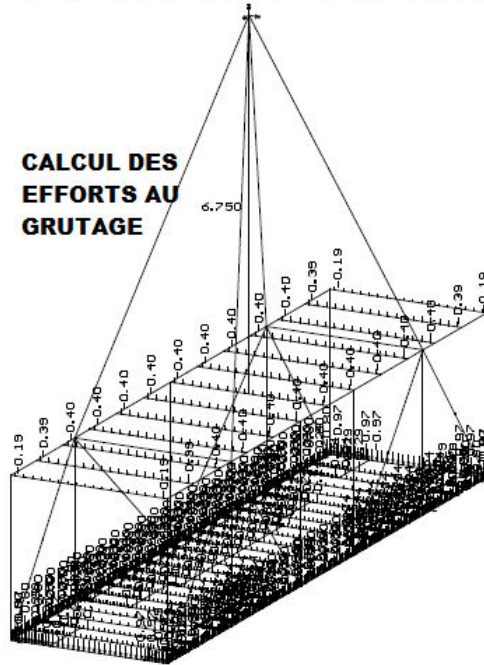




## Présentation des notes de calcul mécanique Exemple d'un shelter DATA CENTER de 12 x 3 m

### CONTAINER - STRESS ANALYSIS

ERECTION STAGE - DIAGRAM OF SUSPENSION AND LOADING:  
L1 DEAD WEIGHT (VALUES DETERMINED USING PROGRAM)



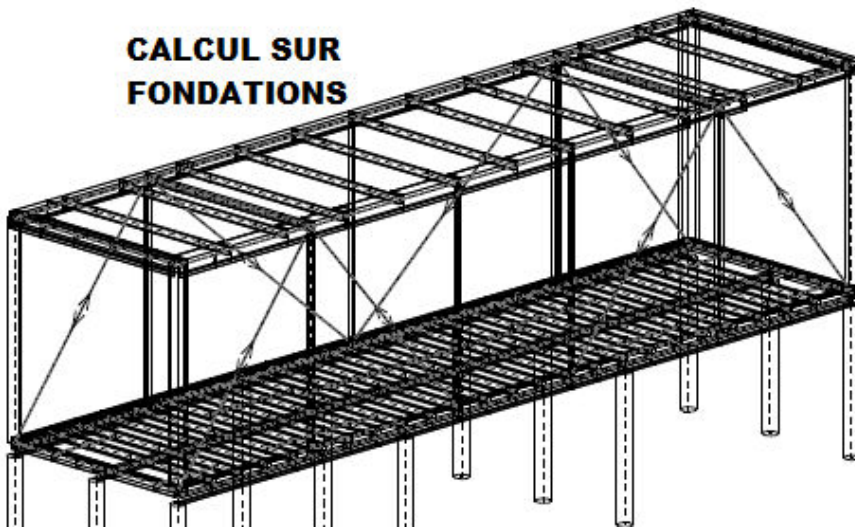
### CONTAINER - STRESS ANALYSIS

#### FOUNDATION ON PILES

The program is designed for the most stressed. Assessment is provided below in this section.

#### ROSTER OF THE CONTAINER

### CALCUL SUR FONDATIONS



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## Présentation des résultats de la note de calcul

### CONTAINER - STRESS ANALYSIS

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#### SUMMARY OF THE RESULTS OF CALCULATION

## STRESS ANALYSIS

Projekt: Single-storey modular structure  
„IT MODUL“

Dimension: Cell: C<sub>IT</sub> 1 × (12,000 × 2,990 × 2,940) m  
C<sub>POWER</sub> 1 × (12,000 × 2,990 × 2,940) m  
L (ZK): B (ZK): H (ZK):

The structure is satisfactory for load from dead weight in combination with loading:

FLOOR USEFUL LOAD:  $p_1 = 12,0 \text{ kN/m}^2$

LOAD FRO SNOW:  $s_0 = 1,50 \text{ kN/m}^2$

LOAD FROM WIND:  $w = 0,65 \text{ kN/m}^2$

#### TECHNOLOGY OF LOAD:

The effects of filling structures (roof membrane, walls, floor structure) on the system rigidity were not (were) taken into consideration when calculating internal forces, stresses and deformations.

#### GENERAL CONCLUSIONS:

THE STRUCTURE IS SATISFACTORY FROM THE VIEWPOINT OF  
STRESS ANALYSIS

13. 8. 2013