



Nombre del Alumno: Antonio de Jesús López López

Nombre del Docente: Pedro Alberto García Lopez

Nombre de la Materia: Análisis De Estructuras

Nombre Del Trabajo: STAAD.Pro

Nombre de la Carrera: Arquitectura

Cuatrimestre: 5°



WARNING

***WARNING - INSTABILITY AT JOINT

NOTES

RESULTS

Cracked Moment of Inertia Iz at above location =0.28193E+08 mm^4

REQUIRED REINF. STEEL SUMMARY :

| SECTION (MM) | REINF STEEL (+VE/-VE) (SQ. MM) | MOMENTS (+VE/-VE) (KNS-MET) | LOAD (+VE/-VE) |
|-------------------|------------------------------------|---------------------------------|----------------|
| 0.00 | 0.00/ 0.00 | 0.00 | 0./ 0.00 |
| 208.33 | 39.28/ 0.00 | 0.00 | 1./ 0.00 |
| 416.67 | 50.56/ 0.00 | 0.00 | 3./ 0.00 |
| 625.00 | 61.44/ 0.00 | 0.00 | 3./ 0.00 |
| 833.33 | 64.92/ 0.00 | 0.00 | 3./ 0.00 |
| 1041.67 | 59.39/ 0.00 | 0.00 | 3./ 0.00 |
| 1250.00 | 50.56/ 0.00 | 0.00 | 2./ 0.00 |
| 1458.33 | 50.56/ 0.00 | 0.00 | 1./ 0.00 |
| 1666.67 | 0.00/ 50.56 | 50.56 | 0./ 0.40 |
| 1875.00 | 0.00/ 50.56 | 50.56 | 0./ 2.41 |
| 2083.33 | 0.00/ 98.42 | 0.00 | 0./ 4.85 |
| 2291.67 | 0.00/ 165.41 | 0.00 | 0./ 7.73 |
| 2500.00 | 0.00/ 255.01 | 0.00 | 0./ 11.04 |

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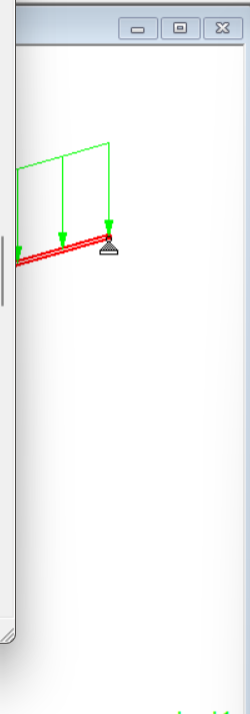
STAAD SPACE

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BEAM NO. 1 DESIGN RESULTS - SHEAR

Total Page: 6 NUM

Design / Earthquake



Load & Definition

- Definitions
 - Load Cases Details
 - 1: CM+CV
 - SELFWEIGHT Y-1
 - UNI GY -950 kg/m
 - UNI GY -1800 kg/m
 - Load Envelopes

New... Add... Edit... Delete...

Toggle Load

Assignment Method

Assign To Selected Beams/Plates Use Cursor To Assign Assign To Edit List

12

Assign Close Help

Load 1



WARNING

WARNING: IN UNIFORM MEMBER LOA
***WARNING - INSTABILITY AT JOINT

NOTES

RESULTS

Cracked Moment of Inertia I_z at above location =0.88456E+08 mm⁴

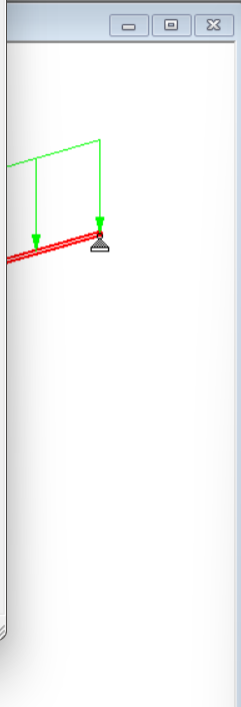
REQUIRED REINF. STEEL SUMMARY :

| SECTION (MM) | REINF STEEL (+VE/-VE) (SQ. MM) | MOMENTS (+VE/-VE) (KNS-MET) | LOAD (+VE/-VE) | | | |
|-------------------|------------------------------------|---------------------------------|----------------|------|----|---|
| 0.00 | 0.00/ | 0.00 | 0./ | 0.00 | 1/ | 0 |
| 300.00 | 80.70/ | 0.00 | 6./ | 0.00 | 1/ | 0 |
| 600.00 | 153.49/ | 0.00 | 12./ | 0.00 | 1/ | 0 |
| 900.00 | 223.97/ | 0.00 | 17./ | 0.00 | 1/ | 0 |
| 1200.00 | 279.55/ | 0.00 | 21./ | 0.00 | 1/ | 0 |
| 1500.00 | 302.89/ | 0.00 | 22./ | 0.00 | 1/ | 0 |
| 1800.00 | 307.82/ | 0.00 | 22./ | 0.00 | 1/ | 0 |
| 2100.00 | 294.00/ | 0.00 | 22./ | 0.00 | 1/ | 0 |
| 2400.00 | 262.34/ | 0.00 | 20./ | 0.00 | 1/ | 0 |
| 2700.00 | 214.74/ | 0.00 | 16./ | 0.00 | 1/ | 0 |
| 3000.00 | 153.57/ | 0.00 | 12./ | 0.00 | 1/ | 0 |
| 3300.00 | 81.27/ | 0.00 | 7./ | 0.00 | 1/ | 0 |
| 3600.00 | 0.00/ | 0.00 | 0./ | 0.00 | 0/ | 1 |

BEAM NO. 1 DESIGN RESULTS - SHEAR

AT START SUPPORT - V_u= 0.05 KN V_c= 0.00 KN V_s= 0.00 KN

Design / Earthquake



Load 1

Load & Definition

- Definitions
 - Load Cases Details
 - 1. CM+CV
 - SELFWEIGHT Y-1
 - UNI GY-720 0 1.1 kg/m
 - UNI GY-1200 1.1 kg/m
 - CON GY-570 1.1 kg/m
 - Load Envelopes

Buttons: New... Add... Edit... Delete...

Toggle Load

Assignment Method

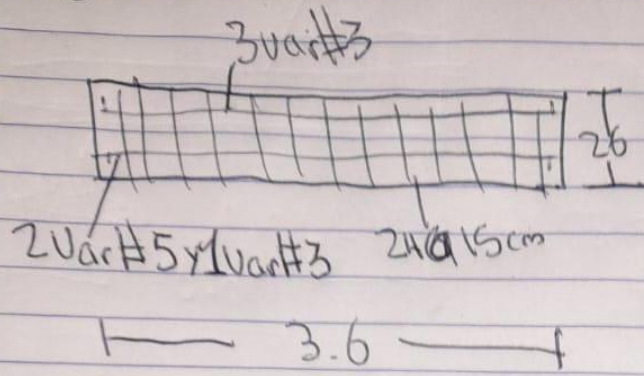
Assign To Selected Beams/Plates Use Cursor To Assign

Assign To View Assign To Edit List

1

Buttons: Assign Close Help

EJERCICIO



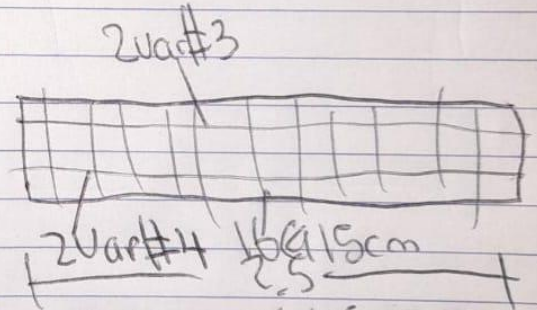
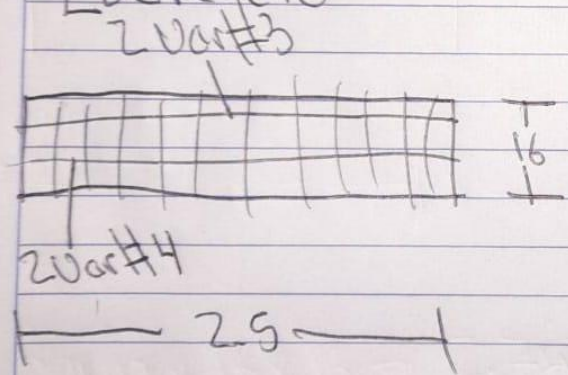
$$0.01143 \times 26 \times 15 = \frac{4.45}{3}$$

$$= 1.48$$

$$1.99 + 1.99 + .71 = 4.69$$

#5 #5 #3

Ejercicio



$$0.01143 \times 16 \times 15 = 2.74$$

$$= 1.37$$

$$2.74 \times 2 = 2.54$$