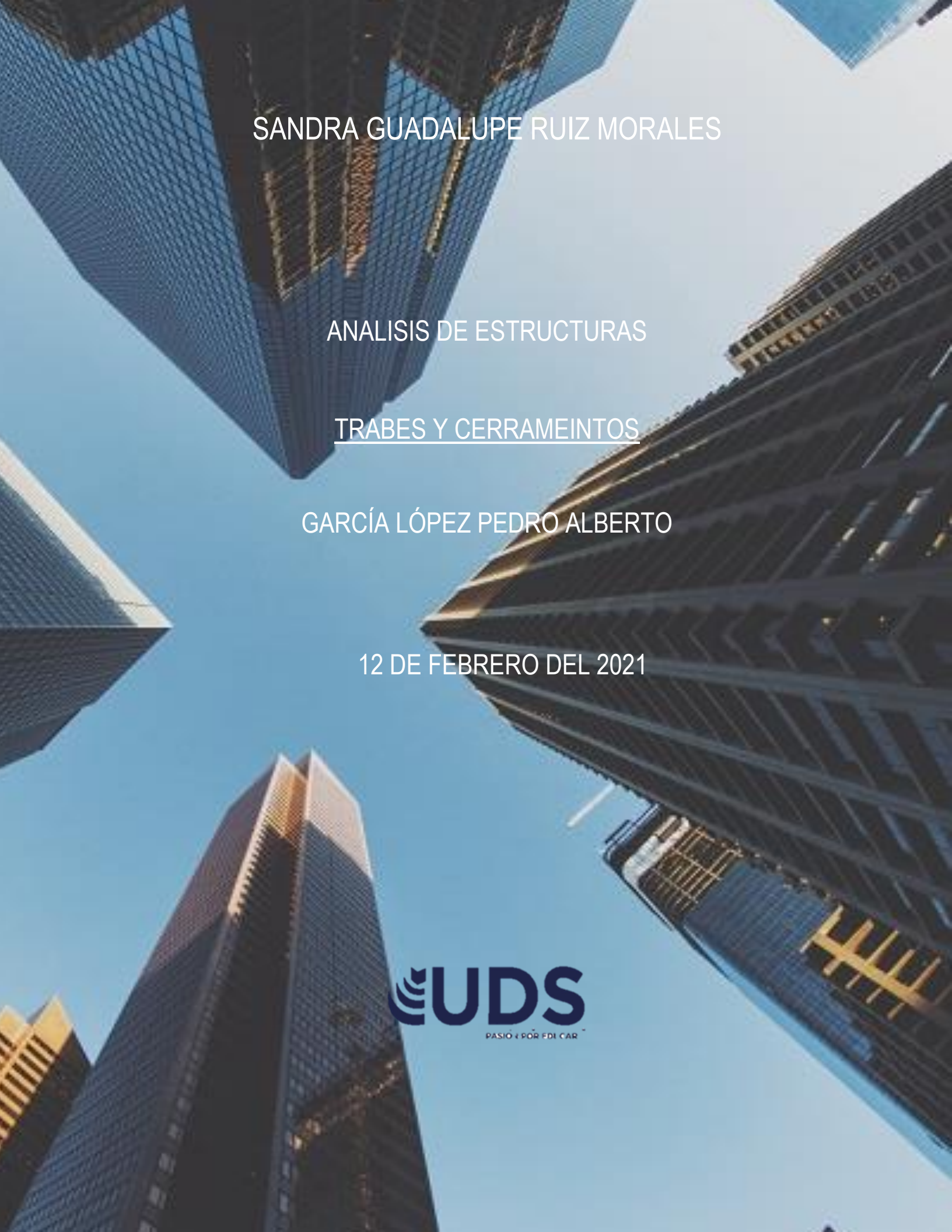


SANDRA GUADALUPE RUIZ MORALES

ANALISIS DE ESTRUCTURAS

TRABES Y CERRAMEINTOS

GARCÍA LÓPEZ PEDRO ALBERTO

12 DE FEBRERO DEL 2021

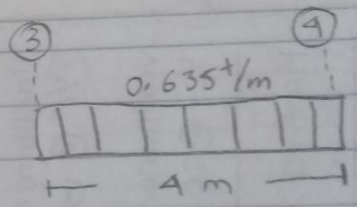
UDS

PASIÓN POR EDUCAR

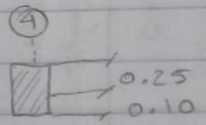
dibujos en archivo DWG

— TRABE 1 —

$4\,m^2\ (635\,kg/m^2) = \frac{2\,540}{4} = 0.635\ t/m$

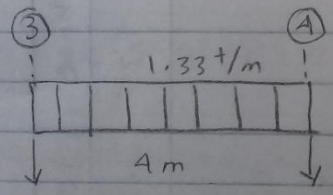


$4/12 = 0.33 \rightarrow 0.35$



- Vidrio = 2.8m x 0.0075 t/m = 0.021 t/m
- cerramiento = 0.15 x 0.25 x 0.240 = 0.009 t/m
- área losa azotea = $4m^2\ (0.665\ t/m^2) = \frac{2.66\ t/m^2}{4m} = 0.665\ t/m$

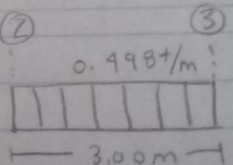
$0.635\ t/m + 0.695\ t/m = 1.33\ t/m \times 4m = 5.32/2 = 2.66\ ton$



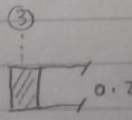
2.66 ton 2.66 ton

— TRABE 2 —

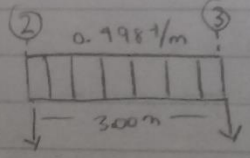
$2.25\,m^2\ (665\,kg/m^2) = \frac{1\,496.25\,kg/m^2}{3m} = 0.498\ t/m$



$3/12 = 0.25$



$0.498 \times 3 = 1.494/2 = 0.747\ ton$

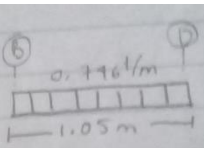


0.747 ton 0.747 ton

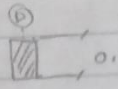
— CERRAMIENTO 1 —

— CERRAMIENTO 1 —

$5.5225\,m^2\,(635\,kg/m^2) = \frac{3\,506.7875}{4.70m} = 0.746\,t/m$

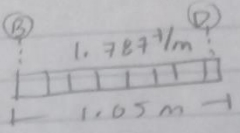


$1.05/12 = 0.0875 \rightarrow 0.25$



continuidad tablero 5

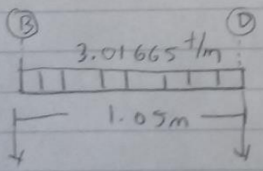
$9.1\,m^2\,(635\,kg/m^2) = \frac{5\,778.5\,kg/m^2}{5.55m} = 1.041\,t/m$



- muro: $2.90m \times 0.270\,t/m^2 = 0.783\,t/m$
- cerramiento: $0.15 \times 0.25 \times 0.240 = 0.009\,t/m$
- área losa azotea: $5.5225\,m^2\,(0.665\,t/m^2) = 3.67\,t/m^2 / 4.70m = 0.78\,t/m$
- área hueco puerta: $2.10m \times 0.90m = 1.89\,m^2 \times 0.270\,t/m^2 = 0.5103\,ton$

$1.787 + 1.572 = 3.359\,t/m\,(1.05m) = 3.52695 - 0.5103 = 3.01665/2$

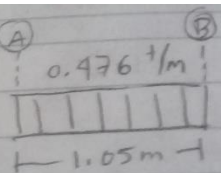
$= 1.508\,ton$



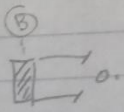
1.508 ton 1.508 ton

— CERRAMIENTO 2 —

$2.25\,m^2\,(635\,kg/m^2) = \frac{1\,428.75\,kg/m^2}{3m} = 0.476\,t/m$

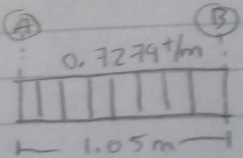


$1.05/12 = 0.0875 \rightarrow 0.25$



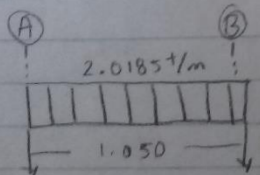
Continuidad tablero 6

$0.8531\,m^2\,(635\,kg/m^2) = \frac{541.7185\,kg/m^2}{2.15m} = 0.2519\,t/m$



- muro: $2.90m \times 0.270\,t/m^2 = 0.783\,t/m$
- cerramiento: $0.15 \times 0.25 \times 0.240 = 0.009\,t/m$
- área losa azotea: $2.25\,m^2\,(0.665\,t/m^2) = \frac{1.496\,t/m^2}{3m} = 0.4986\,t/m$

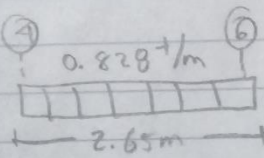
$0.7279\,t/m + 1.2906\,t/m = 2.0185\,t/m\,(1.050m) = 2.119/2 = 1.0595\,ton$



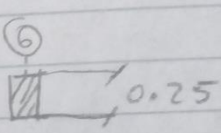
1.0595 ton 1.0595 ton

← CERRAMIENTO 3 —

$6.2275\ m^2 (665\ kg/m^2) = \frac{4\,141.2875\ kg/m^2}{5m} = 0.828\ t/m$



$2.65/12 = 0.22 \rightarrow 0.75$



$0.828\ t/m \times 2.65m = 2.1942 / 2 = 1.0971\ ton$