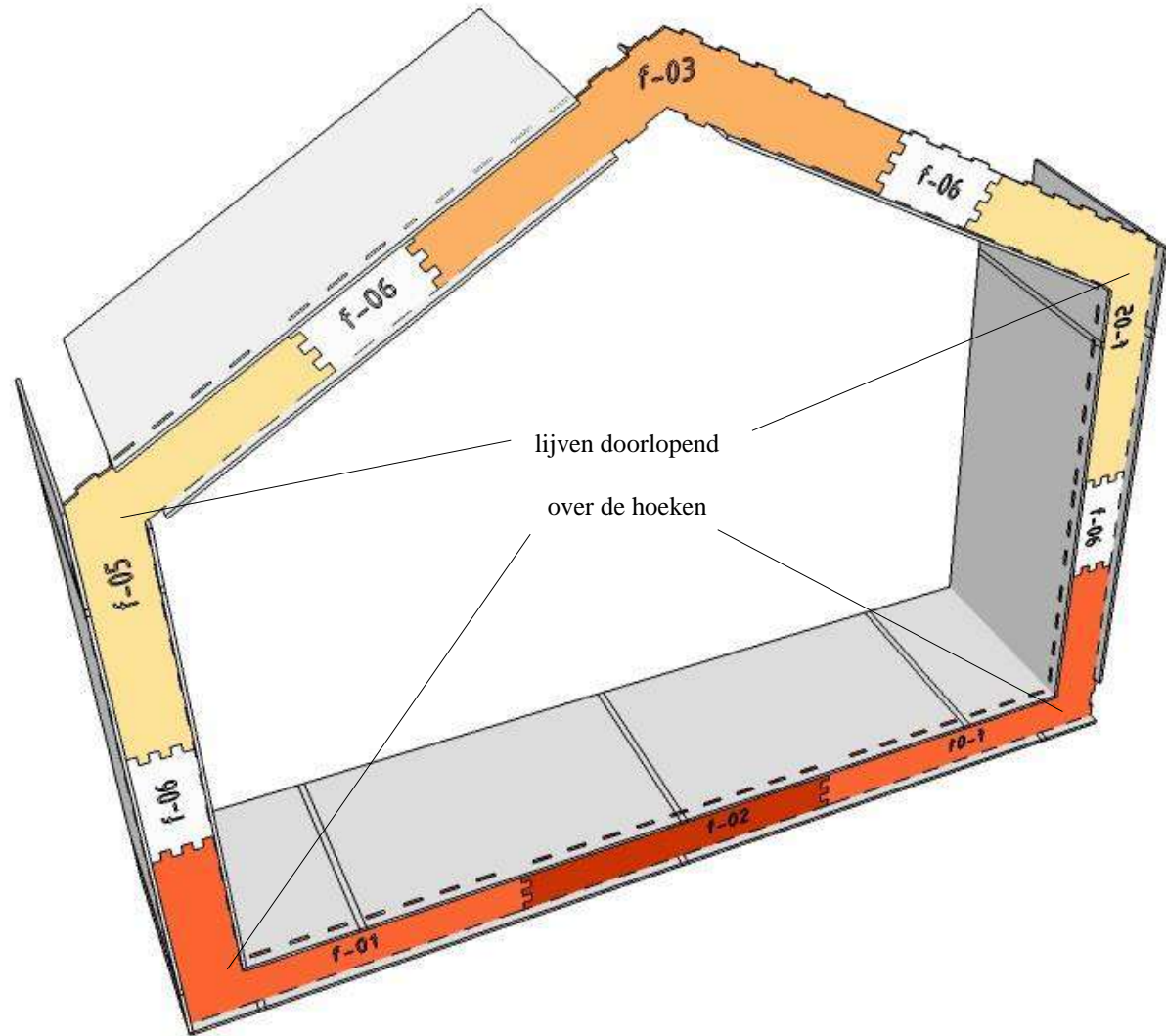
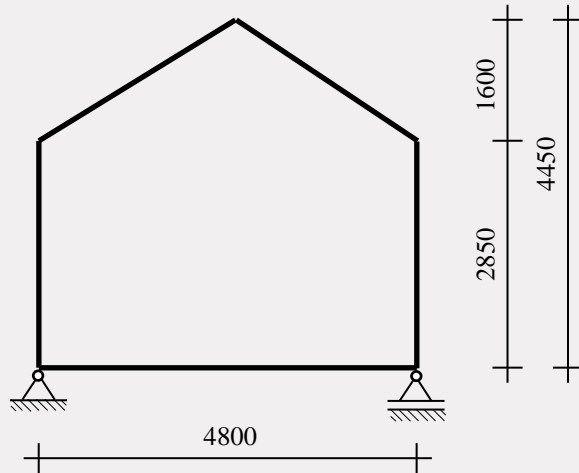
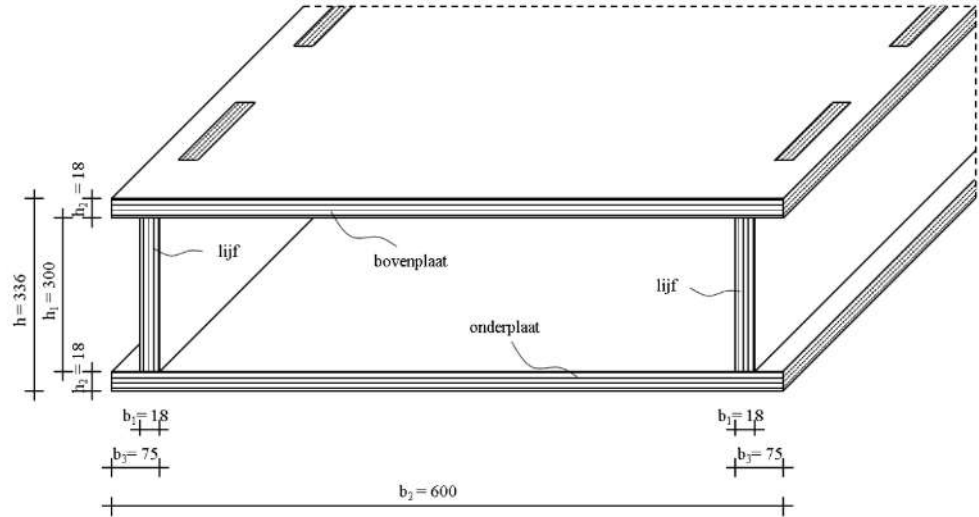
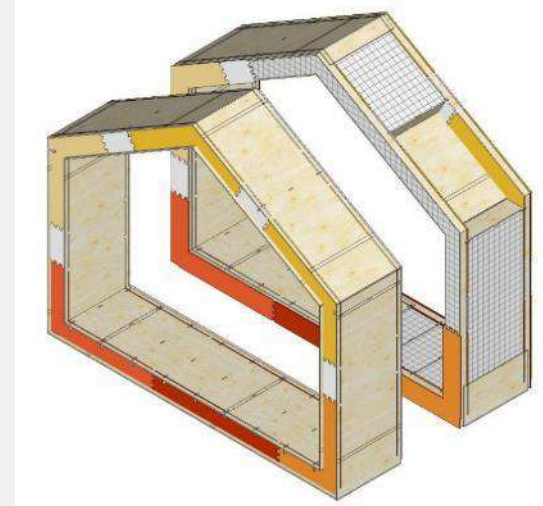
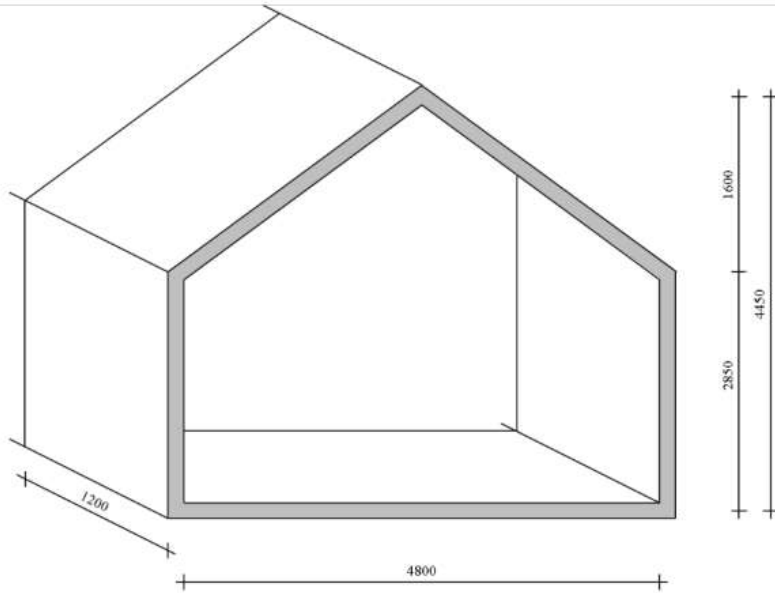


WikihouseNL pionierswoning



WikihouseNL: pionierswoning



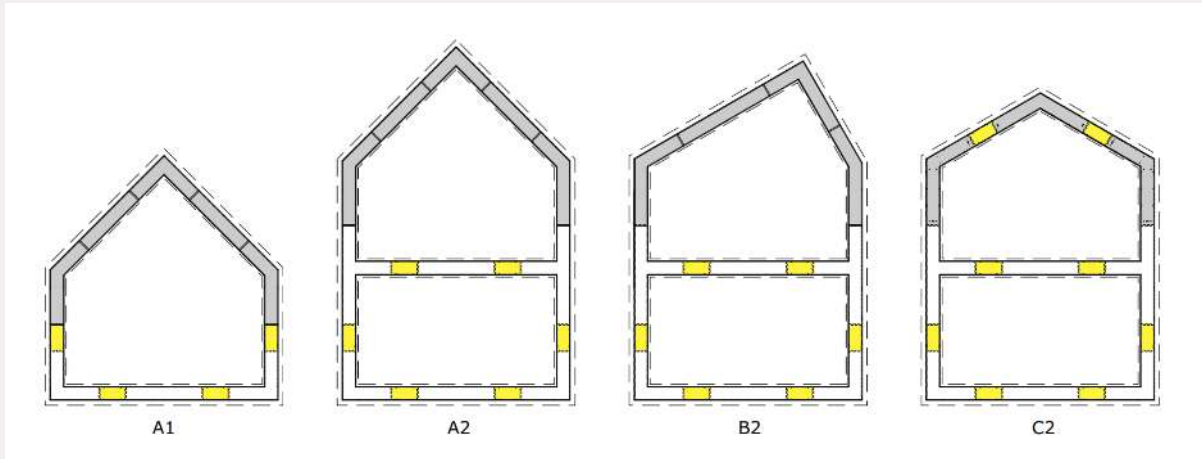




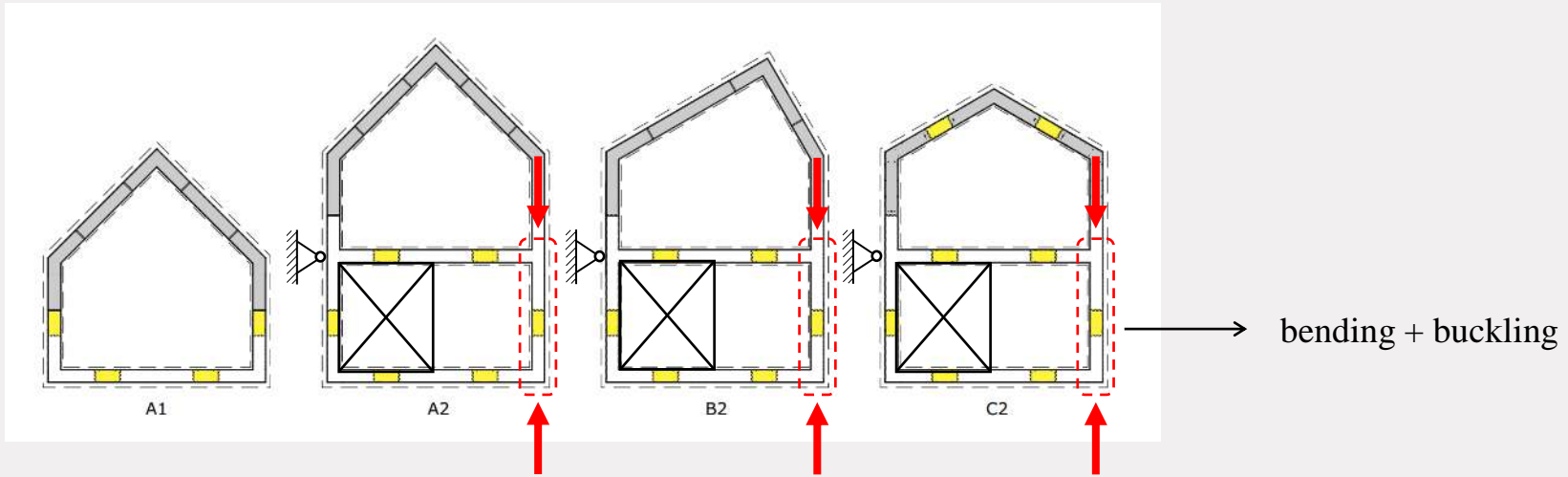
WikihouseNL: pionierswoning



WikihouseNL: Stripmakersbuurt



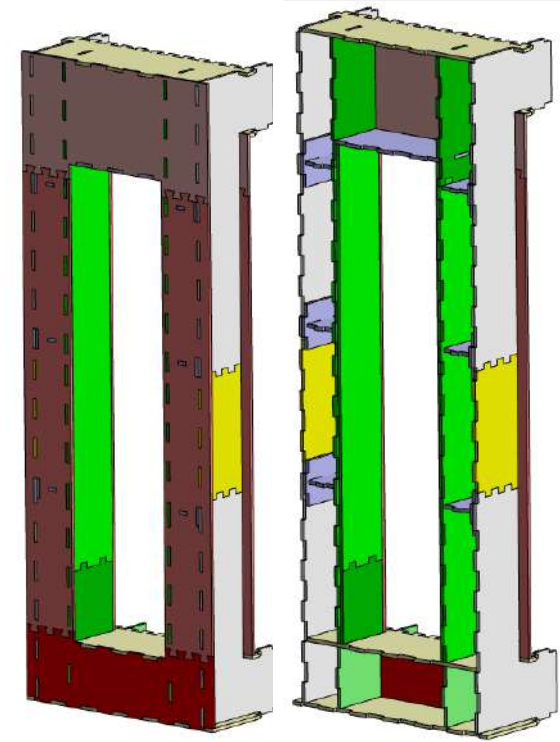
WikihouseNL: Stripmakersbuurt



Example buckling WikihouseNL



Example buckling WikihouseNL



Example bending WikihouseNL



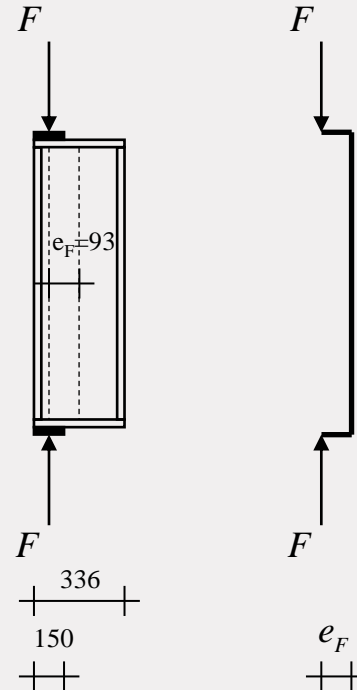
Combination: bending + buckling

$$e = e_0 + e_F + e_m$$

$e_0 =$ initial excentricity

$e_F =$ excentricity of the load \longrightarrow

$e_m =$ displacement due to wind load



Combination: bending + buckling

$$UC = \frac{M_{Ed,mean} + \frac{n}{n-1} \cdot (e_0 + e_F + e_m) \cdot N_{Ed}}{M_{Rd}} + \frac{N_{Ed}}{N_{Rd}} \leq 1,00$$

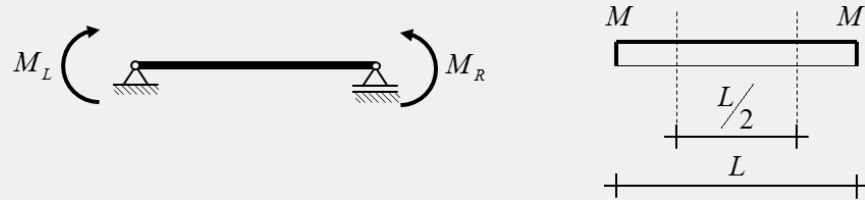
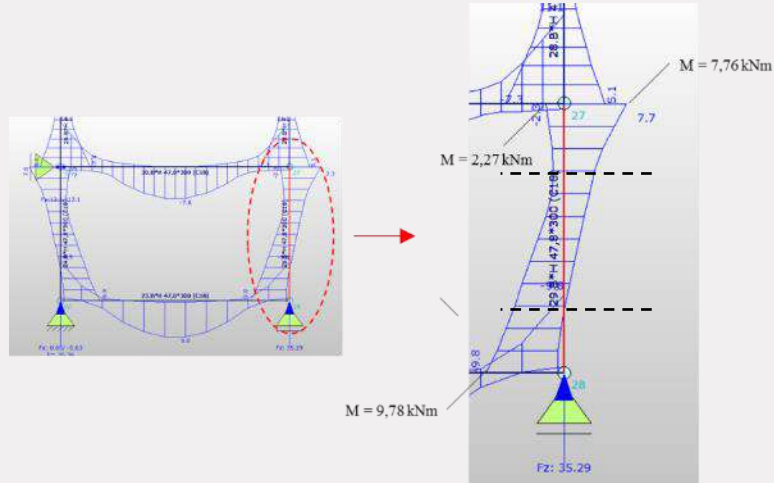
Expressed in stresses:

$$\frac{n}{n-1} \cdot \frac{F \cdot e}{W} + \frac{M}{W} + \frac{F}{A} \leq 1,0$$

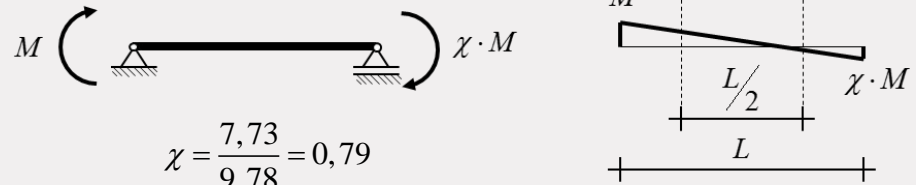
$e = e_0 + e_F + e_m$

Combination: bending + buckling

$M_{Ed,mean}$ = average design moment over the middle half of the beam



$$M_{gem} = \frac{M_{links} + M_{rechts}}{2} = \frac{2,27 + 9,78}{2} = 6,0 \text{ kNm}$$



$$\chi = \frac{7,73}{9,78} = 0,79$$

$$M_{gem} = M_{max} \cdot (0,6 + 0,4 \cdot \chi) \geq 0,43 \cdot M_{max}$$

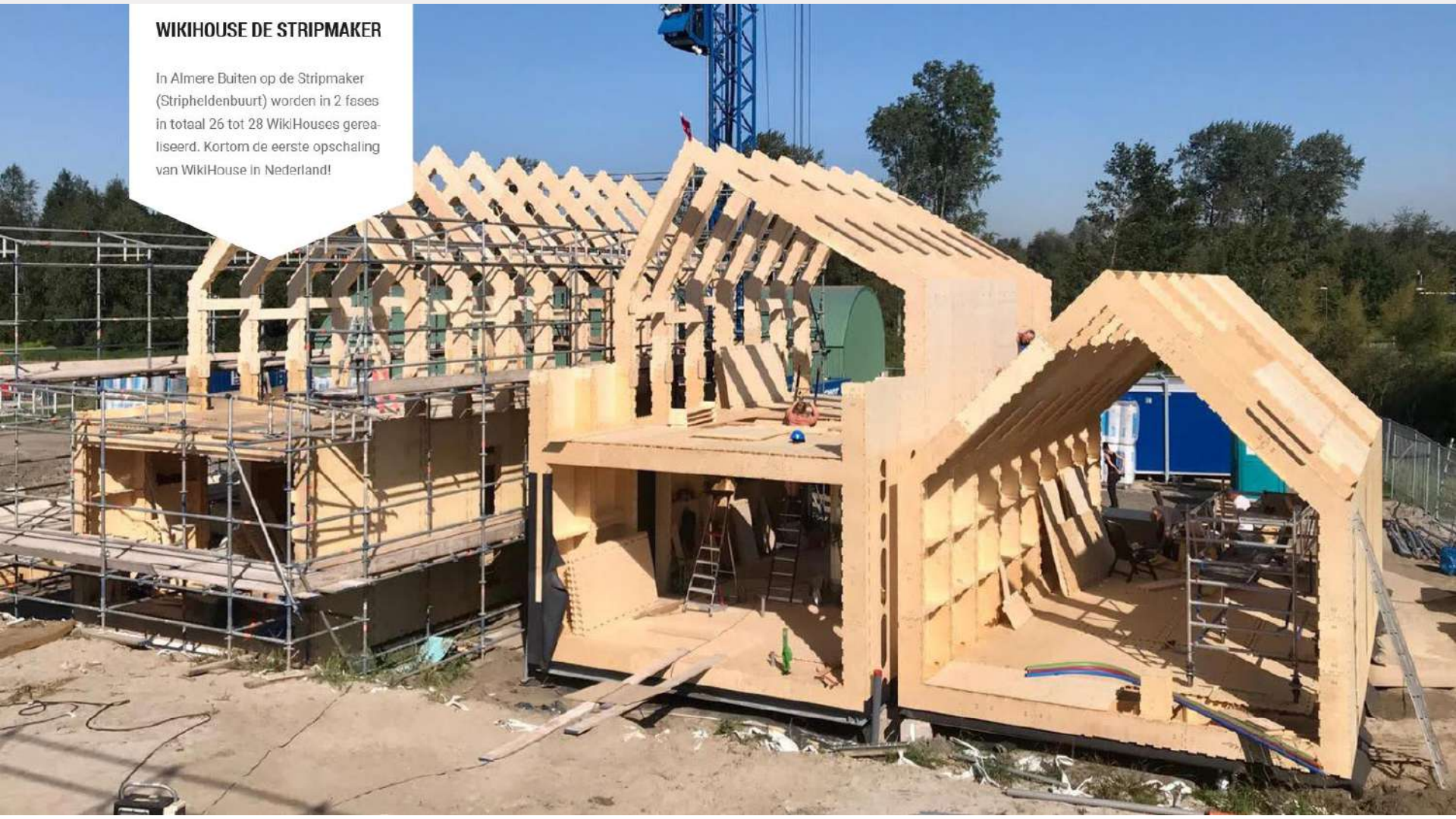
$$M_{gem} = 9,78 \cdot (0,6 + 0,4 \cdot 0,79) \geq 0,43 \cdot 9,78$$

$$M_{gem} = 8,96 \geq 4,2$$

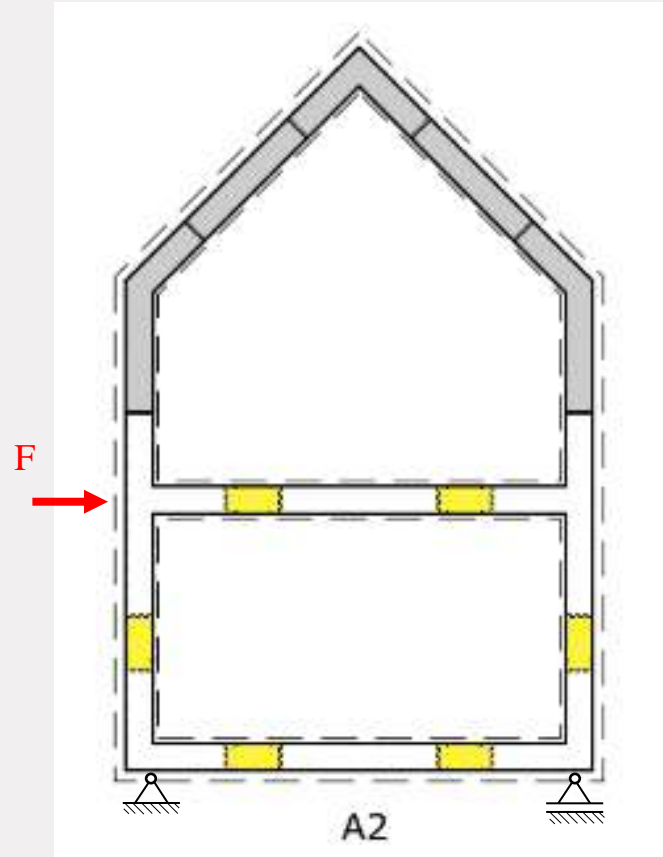
$$M_{gem} = 8,96 \text{ kNm (normative)}$$

WIKIHOUSE DE STRIPMAKER

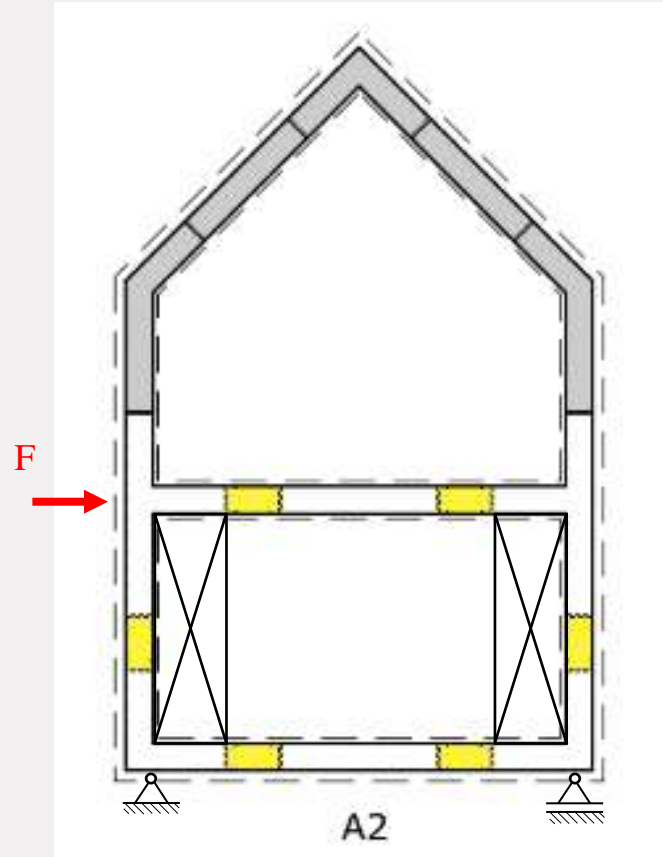
In Almere Buiten op de Stripmaker (Stripheldenbuurt) worden in 2 fases in totaal 26 tot 28 WikiHouses gerealiseerd. Kortom de eerste opschaling van WikiHouse in Nederland!



Stabiliteit segment



Stabiliteit segment



Questions?



**Ontwerp en
bouw je eigen
betaalbare
WikiHouse!**

