

Design Criteria:

Wind:

Canberra A3 (built up area)  
 Importance level 1 (low degree of hazard to life)  
 Design Working life 5 years  
 APE 1/25 years  
 -> Site Wind = 0.57kPa

Hoarding Factor:

2.4m high Cpn = 1.21 -> Factored Wind = 0.69kPa

Base Reaction with posts @1800CTS

2.4m high ->  $M^* = 3.6kNm$ ,  $V^* = 3.0kN$

-> 300dia x 1600 deep

Geotechnical parameters provided by Fortify Geotechs

Soil/Rock Property	Bulk Density $\gamma_b$ (kN/m <sup>3</sup> )	C (kPa)	$\phi'$ (degrees)	Elastic Modulus (MPa)	Active $K_a$	At Rest $K_0$	Passive $K_p$	Modulus of Subgrade Reaction (MN/m <sup>3</sup> )
FILL	19	0	20	10	0.49	0.66	2.1	10

High deflection (no brittle finishes)

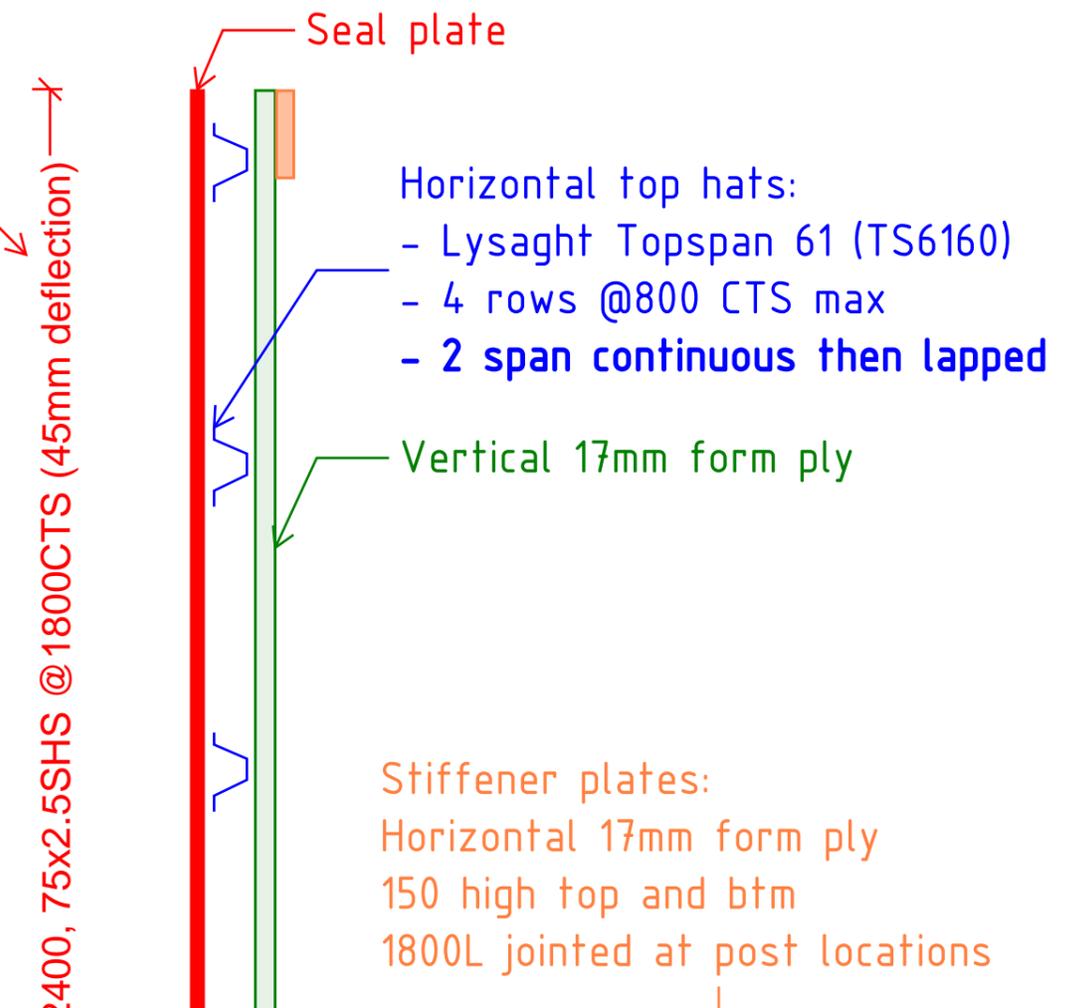
STRUCTURAL ENGINEER

HPCE Pty Ltd  
 ABN 42 664 897 483  
 Churchill House  
 GF/218 Northbourne Avenue  
 Braddon ACT 2612

hpce.com.au

**Project:** Block 40-41 Section 54 Belconnen ACT  
**Job#:** 240615  
**Description:** 5 Year Design Lift Fencing  
**Approved:** HPCE  
**Date:** 12/11/2024

THOMAS HOANG  
 BE(Hons 1) MIEAust CPEng NER DEP PRE RBP



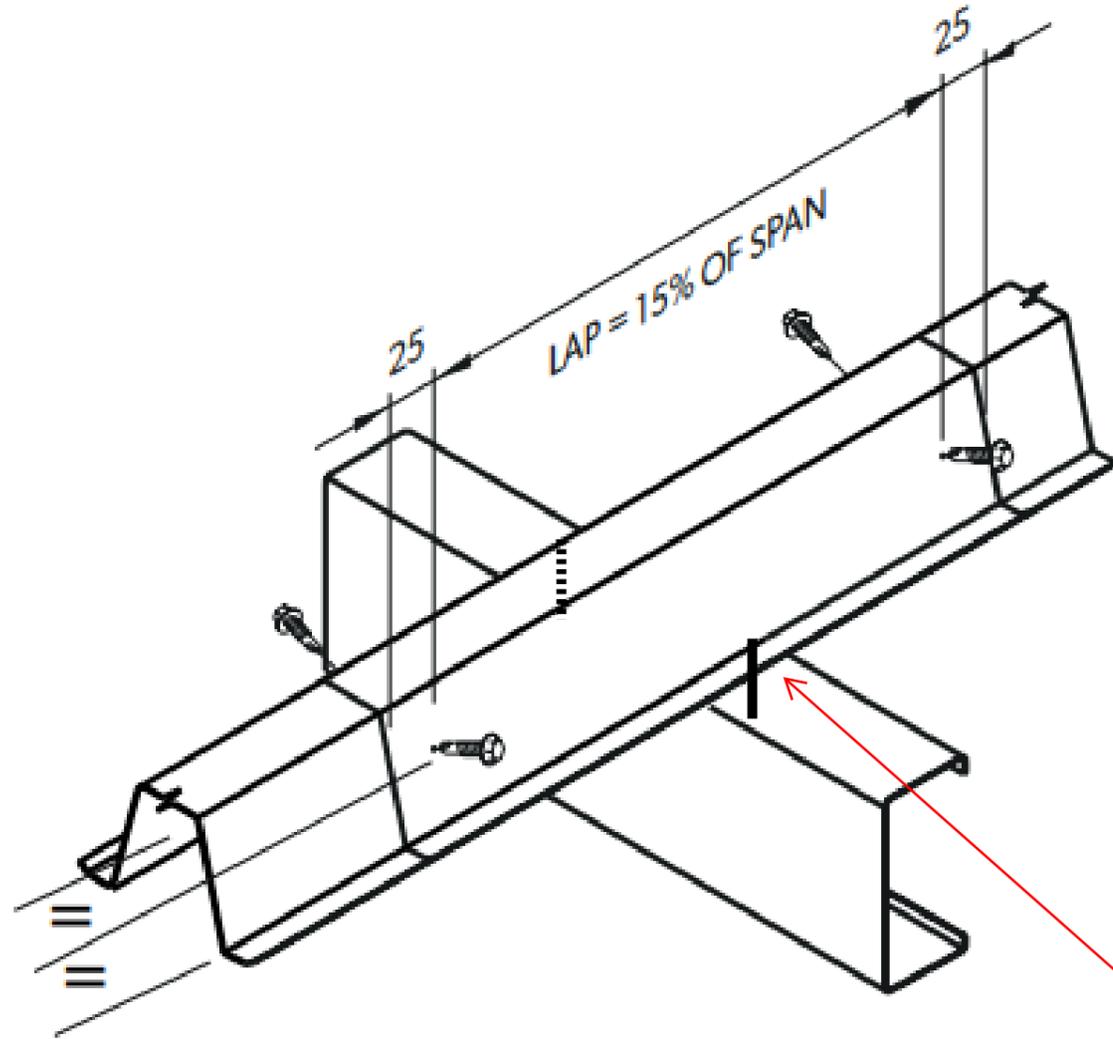
FILL WITH GEOTECHNICAL PARAMETERS PROVIDED

N20 mass fill concrete

300 dia

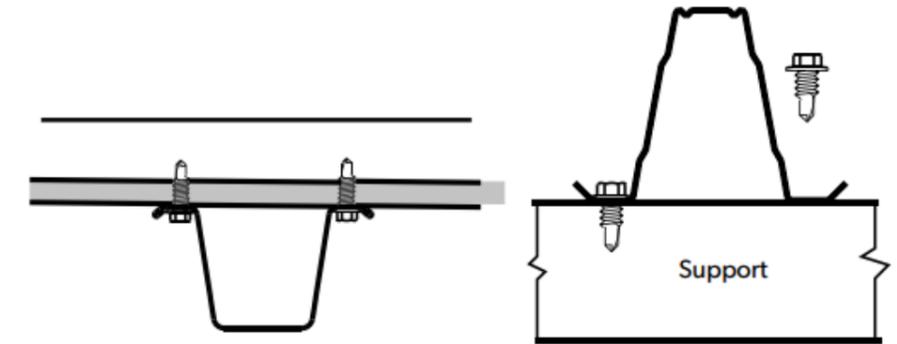
**FOR CONSTRUCTION**

# Typical Structural Lap for TOPSPAN® 61

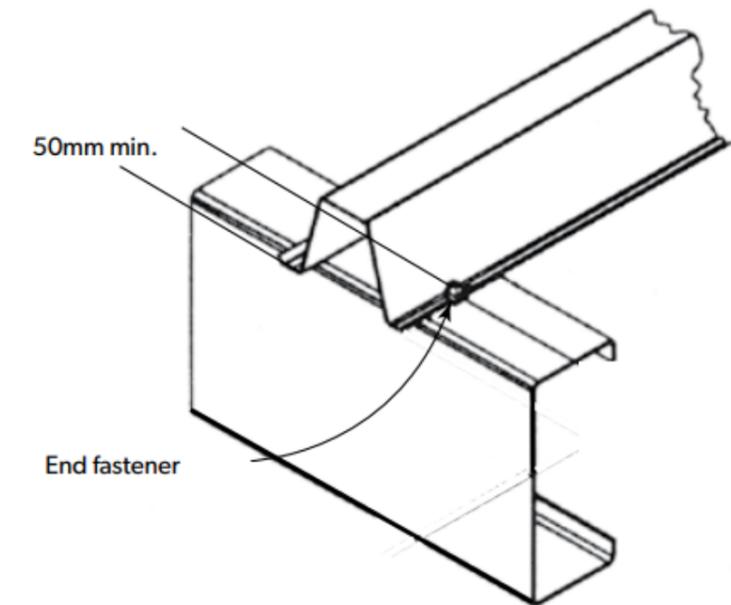


## Fastener location

Fastener location-screws must be located in the mid-region of the flat portion of both flanges



## End Support



## FASTENER SPECIFICATION

### FASTENERS: SCREW TO STEEL SUPPORT

TOPSPAN®	Steel Support Thickness (mm) & Grade (MPa)				
	0.75 (G550)	1.0 (G550)	1.2 (G500)	1.5 (G450)	1.9 (G450)
TS2242	#10-16x16 HH	#10-16x16 HH			
TS4048, TS4055, TS4075	#10-16x16 HH	#10-16x16 HH	#12-14x20 HH	#12-14 x20 HH	
TS6160, TS6175, TS6110, TS6112		#12-14x20 HH	#12-14x20 HH	#12-14x20 HH	#12-14x20 HH
TS9675, TS9610, TS9612		M6.5-12x30 HH	#14-10x25 HH	#14-10x25 HH	#14-10x25 HH
TS12070, TS12090, TS12010		M6.5-12x30 HH	#14-10x25 HH	#14-10x25 HH	#14-10x25 HH

2 screws per connection

#### Notes:

1. The drill point shall be "self drilling" for metal.
2. HH=Hex. Head.
3. Selection on these pages is an indicative but not comprehensive selection.