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Results

To: Brad Smith From: Doug Gaunt

Organisation: Kronospan Trading SRL Subject: P21:2010 9mm Kronspan OSB 10mm

GIB standard 1200 Wall with Brackets

Location: Northcote **Date:** 28th February 2020

Fax No.: 021 487007 **No. of** 5

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Brad

Please find below the P21 bracing results for your three 1200mm x 2.40m 9mm Kronspan OSB, 10mm GIB standard walls tested with GIB Handibracs.

BU wind = 215 (179 BU/m) as limited by the ultimate load capacity.
 BU Earthquake = 188 (157 BU/m) as limited by the ultimate load capacity.

Note: NZS3604 notes the bracing ratings for walls on timber floors be limited to 120BU/m and those on concrete floors be limited to 150BU/m.

Figures 1, 2 & 3 show the load deflection plots, Figure 4 shows the P21:2010 calculations.

Wall Construction

- 9mm Kronspan OSB one side
- 10mm GIB standard other side
- 90x45 H1.2 SG8 framing, studs at 600mm centres, no nogs
- OSB fixing 50x2.87mm angular grove Paslode gun nails at 150mm centres to plates and end studs
- GIB fixed with Gibgrabber 32mm x 6g screws to Winstones pattern 50,50,50,75,75,150mm...
- GIB Handibracs each end
- M12 hold down bolts to Handibracs and bottom plate
- P21 supplementary restraints used.

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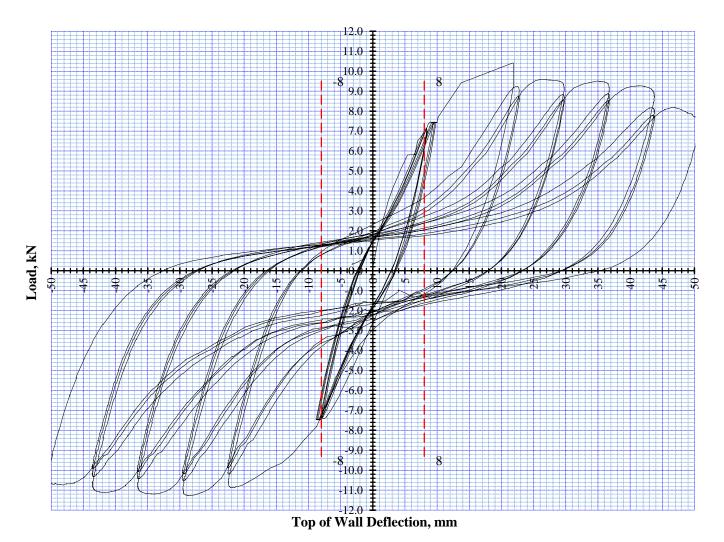


Figure 1: Wall 281763

Observations

- No obvious signs of failure to framing.
- Handibrac's bending
- No obvious signs of failure to OSB
- GIB starting to pulling away on bottom plate nails.

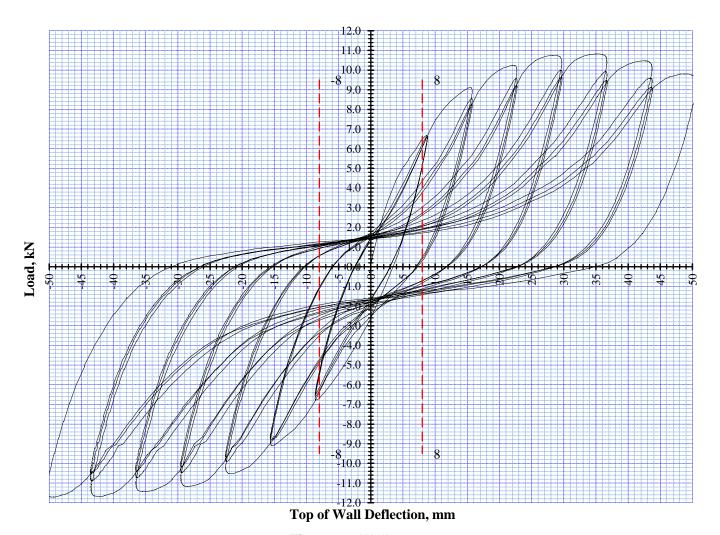


Figure 2: Wall 281764

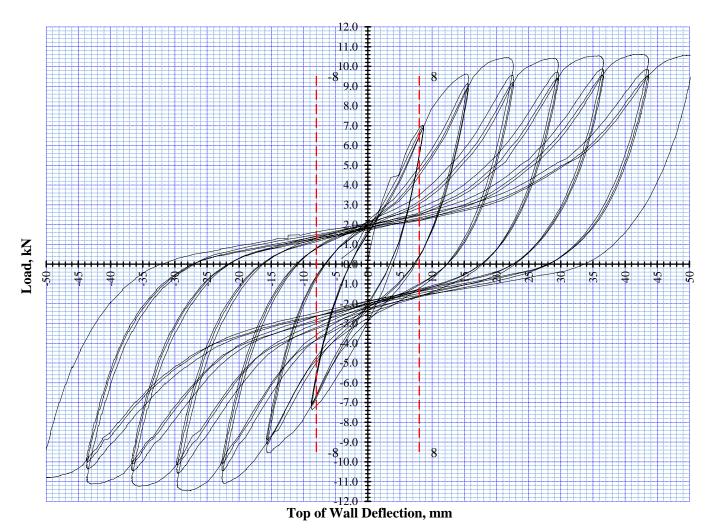


Figure 3: Wall 281765

1200mm, 9mm Kr	onsp	an OSB one	side, 10mm	GIB standard	d other side			
90x45 H1.2 LVL8 fi								
OSB fixing - 50x2.					150mm	Summary		
centres to plates a						Earthquake	157 (U)	BU/m
32mmx 6g GIBgra					150mm	Wind	179 (U)	BU/m
GIB Handibracs ea								
P21 supplementar								
Date of test:-	j .cc	27-Feb-20	Ship No.	3072		Tested by	Jamie Ag	inew
Date of calc's:-		27-Feb-20		TE19-028		Analysed by		
Calculated to BRANZ	Z P2 1:				Scion. Private	Bag 3020 Rote		
		Serviceability		Ultimate Cyc				
		Cycle to H/300 c		Cycle to Disp			Wall dime	ensions
		8.0	Xmm	y=(mm)			L(mm)	H(mm
Lab Number	Ľ	Loads	Residual	Maximum			1200	2400
	cţi	(P ₈)	Defln, C	Load	def @ P		d at P/2	4th,F
	Direction	kN	mm	P(kN)	y (mm)	P/2 (kN)	d mm	kN
		ININ	111111	1 (KIN)	y (111111 <i>)</i>	1 / 2 (NIN)	u IIIII	KIN
281763	+	6.80	2.80	9.48	36.0	4.74	5.0	8.20
201/03	<u> </u>	7.30	2.00	11.10	36.0	1.77	0.0	9.80
281764	+	6.50	3.00	10.77	36.0	5.39	5.8	9.05
	-	6.65	2.50	11.40	36.0	0.00	0.0	10.20
281765	+	6.90	3.40	10.52	36.0	5.26	5.6	9.36
	-	7.15	2.70	11.20	36.0	0.20	0.0	9.77
				0				• • • • • • • • • • • • • • • • • • • •
		(D.)	(C)	(D)	64)	D/2 (kN)	(4)	(D ₁ /)
A		(P ₈) 6.88	(C) 2.73	(P)	(y)	P/2 (kN)	(d)	(Ry)
Averages								
Coefficient of Variation / = average failure of the average first cycle.	deflec le dis	3.99 tion or peak de placement at	15.76 eflection of the half peak, (the	e very first cy	36.00 0.00 cle wall reache	5.13 5.45 es the load)	5.47 6.22	
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Please feel free to contact me to discuss this information.

Doug Gaunt