



31-Jan-14

APA Report For Mill Information on Screw Withdrawal Tests, Lab Project 8594

MILL NO., MILL: **OSB and Plywood Supplied by Client**  
 PRODUCT: **Aspen OSB and Douglas-fir Plywood**  
 SPAN RATING: **NA**  
 EXPOSURE RATING: **Exposure 1**  
 GLUE TYPE: **PF and ISO**

Screw Withdrawal Tests, Test Method ASTM D1761

**GHX Screw (blue)**

No.	15/32" OSB		19/32" OSB		1/2" 5-Ply Plywood	
	Thickness (in.)	Load (lbf.)	Thickness (in.)	Load (lbf.)	Thickness (in.)	Load (lbf.)
1	0.488	233	0.589	407	0.468	411
2	0.487	280	0.586	393	0.472	531
3	0.488	271	0.600	340	0.475	400
4	0.487	212	0.596	253	0.468	417
5	0.481	270	0.592	347	0.478	513
6	0.518	331	0.594	273	0.473	493
7	0.488	249	0.599	423	0.470	408
8	0.501	279	0.604	381	0.472	488
9	0.493	326	0.600	375	0.480	585
10	0.494	272	0.607	328	0.476	531

**TEST RESULTS:**

Minimum:	0.481	212	0.586	253	0.468	400
Maximum:	0.518	331	0.607	423	0.480	585
Average:	0.493	272	0.597	352	0.473	478
Standard Deviation:	0.010	36.7	0.007	55.7	0.004	64.8
Coef. of Var. (%):	2.1	13.5	1.1	15.8	0.9	13.6

**"Carlisle Fastening Criteria"**

7/16" OSB	210 lbf				
15/32" 3-Ply Plywood	240 lbf	5/8" OSB	310 lbf	15/32" 5-Ply Plywood	530 lbf



31-Jan-14

### APA Report For Mill Information on Screw Withdrawal Tests, Lab Project 8594

**MILL NO., MILL:** OSB and Plywood Supplied by Client  
**PRODUCT:** Aspen OSB and Douglas-fir Plywood  
**SPAN RATING:** NA  
**EXPOSURE RATING:** Exposure 1  
**GLUE TYPE:** PF and ISO

#### Screw Withdrawal Tests, Test Method ASTM D1761

##### HP X-TRA Screw (black)

No.	15/32" OSB		19/32" OSB		1/2" 5-Ply Plywood	
	Thickness (in.)	Load (lbf.)	Thickness (in.)	Load (lbf.)	Thickness (in.)	Load (lbf.)
1	0.482	263	0.595	453	0.469	435
2	0.487	291	0.594	384	0.472	619
3	0.489	314	0.595	412	0.468	640
4	0.493	316	0.605	342	0.465	506
5	0.490	222	0.592	421	0.475	523
6	0.493	368	0.594	462	0.475	584
7	0.483	302	0.595	394	0.472	563
8	0.497	302	0.604	448	0.468	541
9	0.501	380	0.600	362	0.478	425
10	0.496	296	0.598	481	0.477	597

#### TEST RESULTS:

Minimum:	0.482	222	0.592	342	0.465	425
Maximum:	0.501	380	0.605	481	0.478	640
Average:	0.491	306	0.597	416	0.472	543
Standard Deviation:	0.006	45.6	0.004	45.7	0.004	72.7
Coef. of Var. (%):	1.2	14.9	0.7	11.0	0.9	13.4

#### "Carlisle Fastening Criteria"

7/16" OSB	210 lbf				
15/32" 3-Ply Plywood	240 lbf	5/8" OSB	310 lbf	15/32" 5-Ply Plywood	530 lbf