

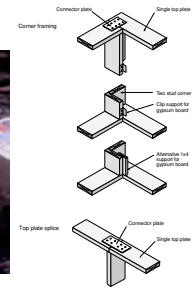


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Joseph Lutzburnk - Wood 13

Advanced Framing System

- 2 Stud Corners



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Joseph Lutzburnk - Wood 14

Advanced Framing System

- Insulated headers
- No header necessary at non-bearing walls

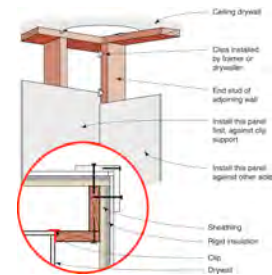


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Joseph Lutzburnk - Wood 15

Advanced Framing System

- Drywall clips allow for better installation with less drywall cracking



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Joseph Lutzburnk - Wood 16

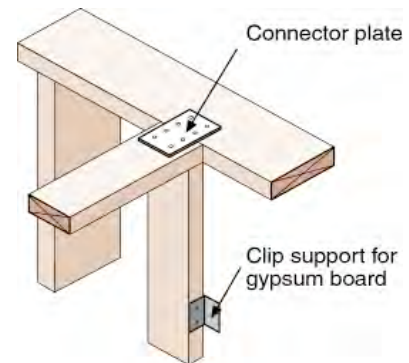
Advanced Framing System

- Drywall clips at corner and intersecting wall



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Joseph Lutzburnk - Wood 17



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Joseph Lutzburnk - Wood 18



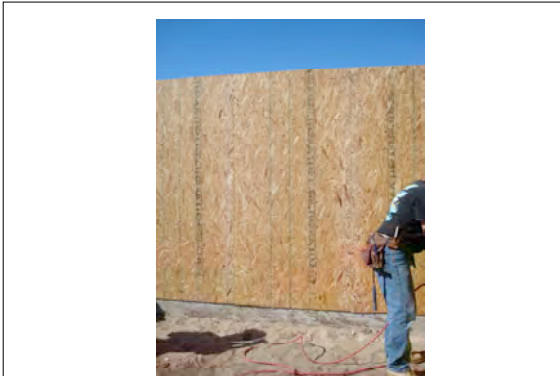
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Joseph Lallburek - Wood 19



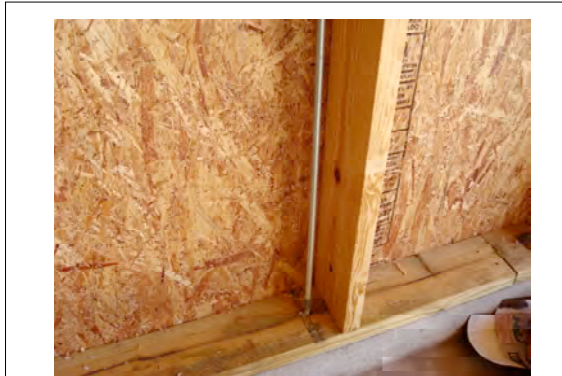
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Joseph Lallburek - Wood 20



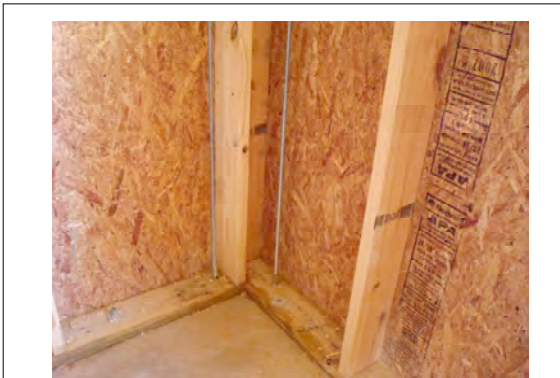
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Joseph Lallburek - Wood 21



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Joseph Lallburek - Wood 22



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Joseph Lallburek - Wood 23



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Joseph Lallburek - Wood 24



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Joseph Lelburek - Wood 25



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Joseph Lelburek - Wood 26



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Joseph Lelburek - Wood 27



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Joseph Lelburek - Wood 28



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Joseph Lelburek - Wood 29



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Joseph Lelburek - Wood 30



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Joseph Lutzburn - Wood 31



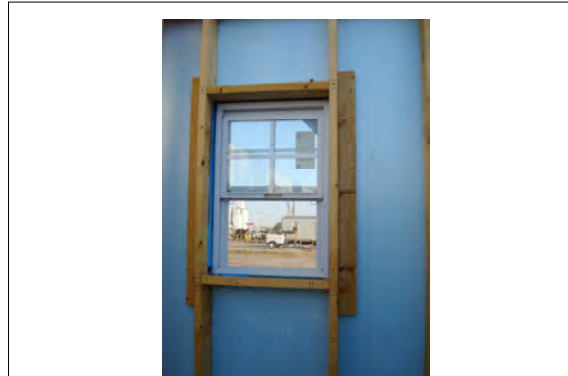
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Joseph Lutzburn - Wood 32



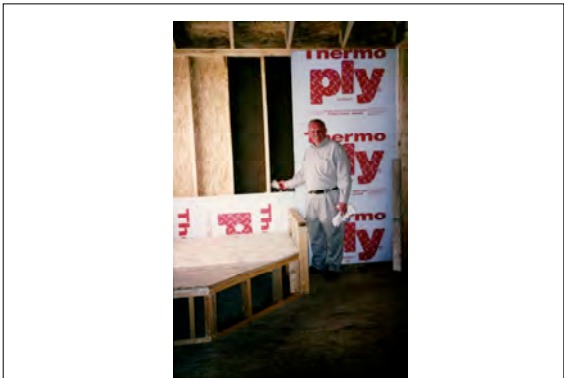
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Joseph Lutzburn - Wood 33



Building Science Corporation
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Joseph Lutzburn - Wood 34



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Joseph Lutzburn - Wood 35



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Joseph Lutzburn - Wood 36



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Joseph Lattburek - Wood 37



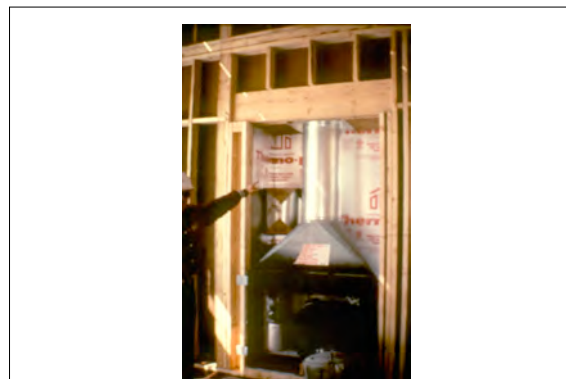
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Joseph Lattburek - Wood 38



Building Science Corporation
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Joseph Lattburek - Wood 39



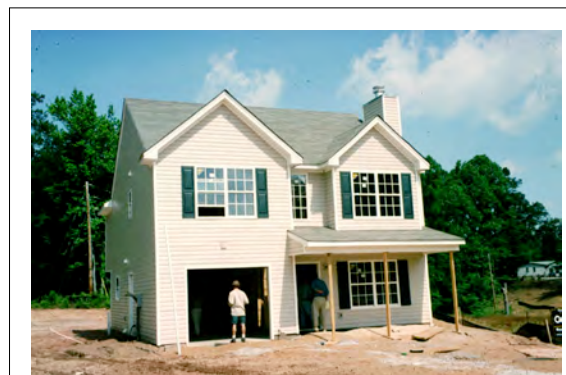
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Joseph Lattburek - Wood 40



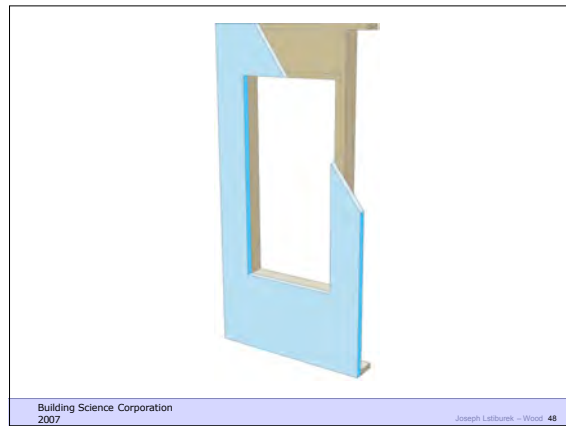
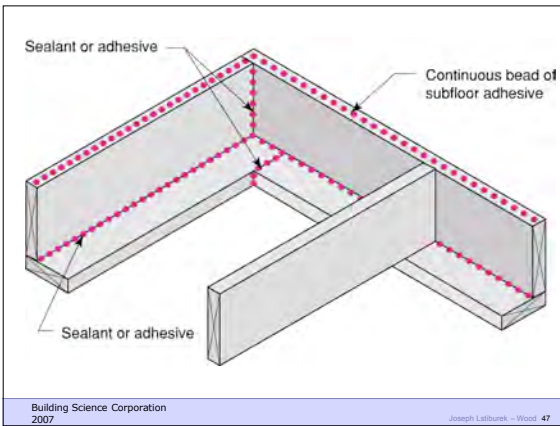
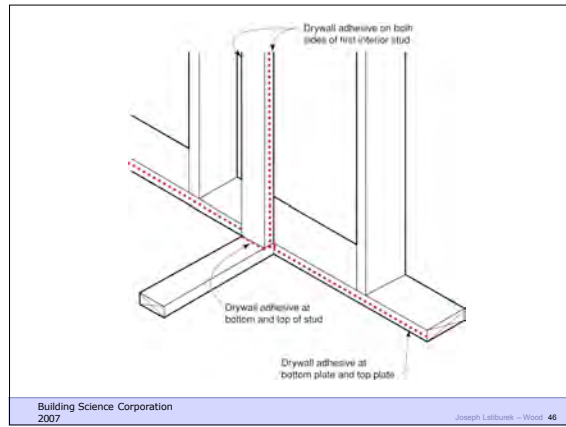
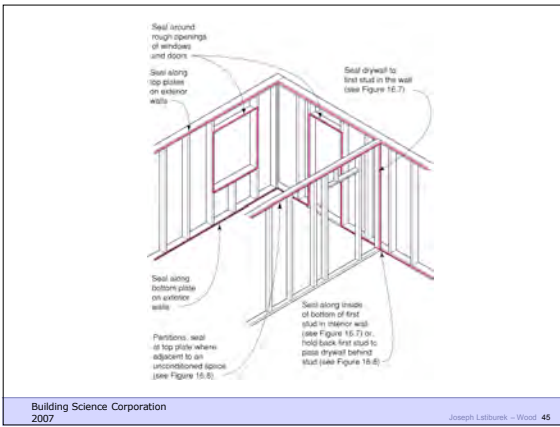
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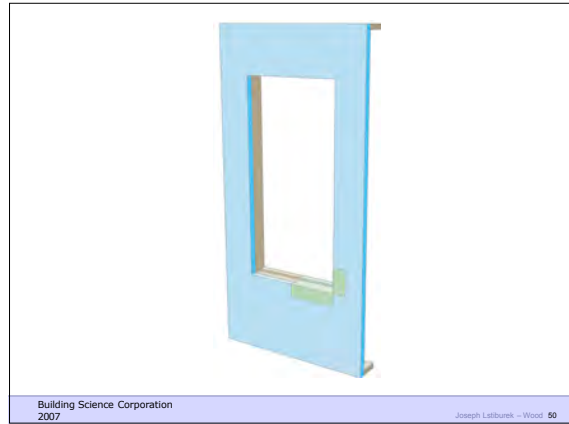
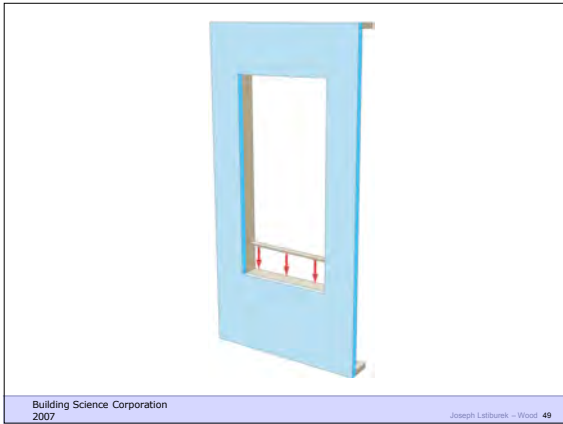
Joseph Lattburek - Wood 41

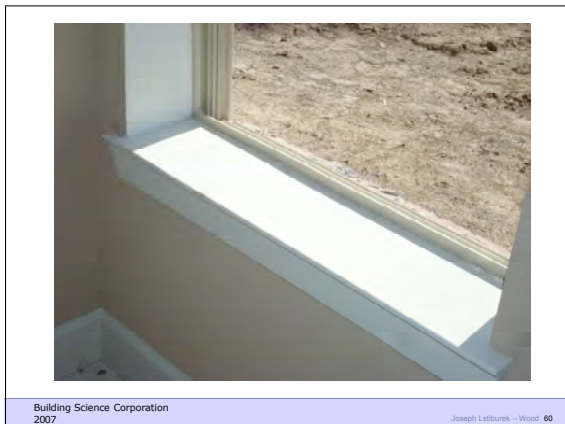


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Joseph Lattburek - Wood 42







CASE STUDY

• HOUSE SPECIFICATIONS

- Conditioned Floor Area	2,495 sq ft
- Total Floor Area	2,910 sq ft
- Typical Wall Height	9'-11" _
- Total Conditioned Volume	24,850cu ft
- Length of Exterior Wall	252 ln ft
- Length of Interior Wall	340 ln ft

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Joseph Lstiburek - Wood 61

CASE STUDY

• 2x4 16" oc WALL

	8'Studs	Bd Ft	Cost
- Ext Wall	467	1634 bd ft	\$ 866
- Ext Plate	95	331 bd ft	\$ 175
- Int Wall	715	2502 bd ft	\$1326
- Int Plate	126	446 bd ft	\$ 237
- Header		273 bd ft	\$ 145
- TOTAL WALL FRAME COST			\$2749

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Joseph Lstiburek - Wood 62

CASE STUDY

• 2x6 24" oc ADVANCED FRAME WALL

	8'Studs	Bd Ft	Cost
- Ext Wall	238	1312 bd ft	\$695
- Ext Plate	63	347 bd ft	\$183
- Int Wall	279	977 bd ft	\$518
- Int Plate	85	298 bd ft	\$158
- Header		148 bd ft	\$78
- TOTAL WALL FRAME COST			\$1632

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Joseph Lstiburek - Wood 63

CASE STUDY

• WOOD FRAME WALL SUMMARY

	2x4	2x6	REDUCED BY
- 8' Studs	1403	665	(-738 / -52%)
- Bd Ft	5186	3082	(-2104 / -40%)
- COST	\$2749	\$1632	(-\$1117 / -40%)

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Joseph Lstiburek - Wood 64

Shear Panel



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Joseph Lstiburek - Wood 65



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Joseph Lstiburek - Wood 66

Shear Panel



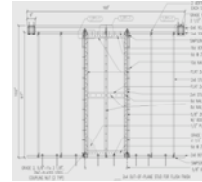
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Joseph Labaree - Wood 67

Seismic Testing

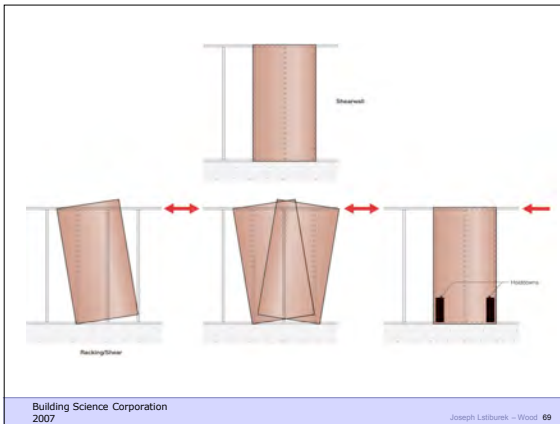
-Work with CERL (the US Army research laboratory), and BSC to facilitating code approval of advanced framing techniques by the Division of the State Architect in California, and other earthquake and high wind loading locations.

-Full scale assemblies have been tested under the new dynamic seismic loading protocols developed after the Northridge earthquake. New non-proprietary shear panels are now available for use that allow for advanced envelope design



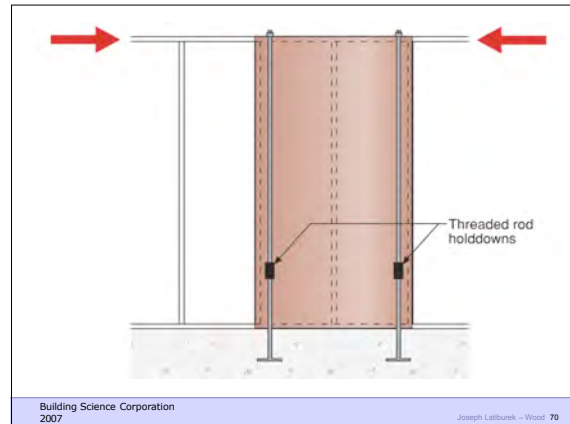
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Joseph Labaree - Wood 68



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Joseph Labaree - Wood 69



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Joseph Labaree - Wood 70

2 Story Aligned



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Joseph Labaree - Wood 71

Standard Plywood Panel

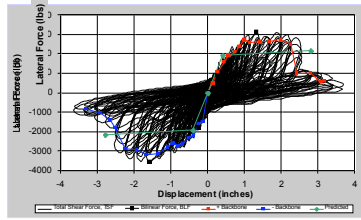
2x4 panel with plywood to establish baselines



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Joseph Labaree - Wood 72

Standard Plywood Panel Performance



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Joseph Lallburek - Wood 73

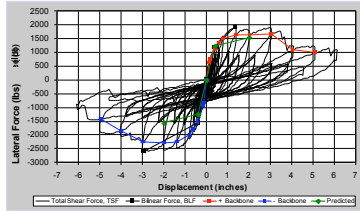
Standard OSB Panel



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Joseph Lallburek - Wood 74

Standard OSB Panel Performance



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Joseph Lallburek - Wood 75



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Joseph Lallburek - Wood 76



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Joseph Lallburek - Wood 77

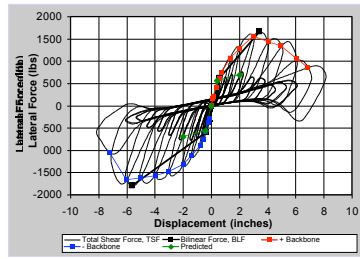
Diagonal Strap Shear Panel CURE1



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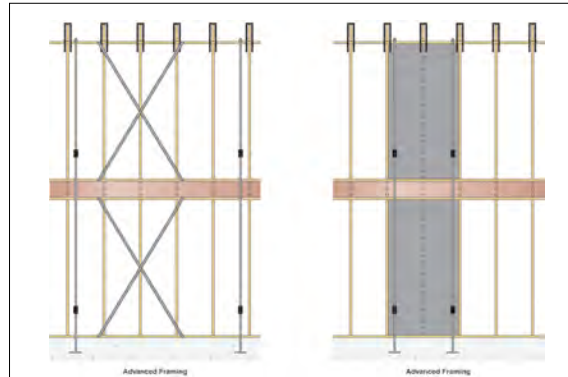
Joseph Lallburek - Wood 78

Diagonal Strap Shear Panel CURE1



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Joseph Labibunek - Wood 79



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Joseph Labibunek - Wood 80



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Joseph Labibunek - Wood 81



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Joseph Labibunek - Wood 82



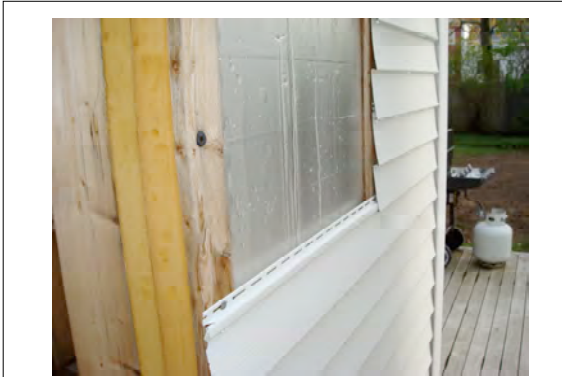
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Joseph Labibunek - Wood 83



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Joseph Labibunek - Wood 84



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Joseph Lallburek - Wood 85



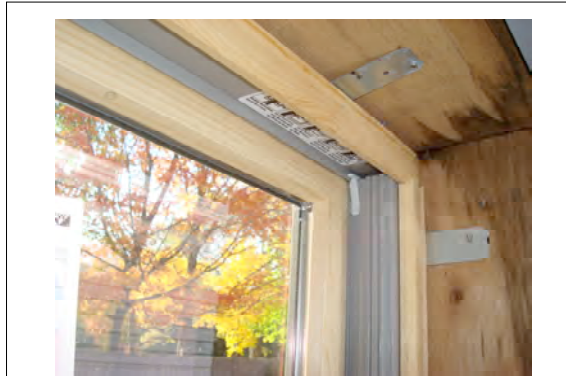
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Joseph Lallburek - Wood 86



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Joseph Lallburek - Wood 87



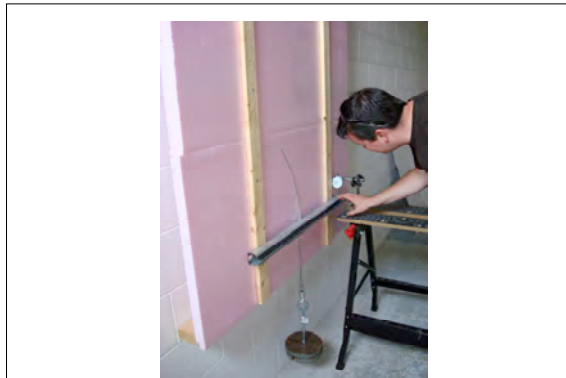
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Joseph Lallburek - Wood 88



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Joseph Lallburek - Wood 89



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Joseph Lallburek - Wood 90



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Joseph Lelburek - Wood 91



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Joseph Lelburek - Wood 92



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Joseph Lelburek - Wood 93



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Joseph Lelburek - Wood 94



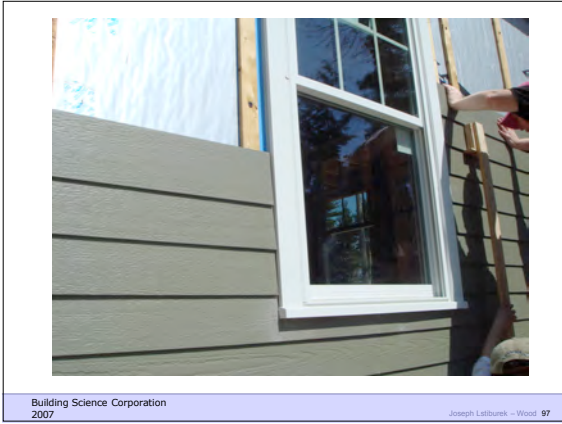
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Joseph Lelburek - Wood 95



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Joseph Lelburek - Wood 96



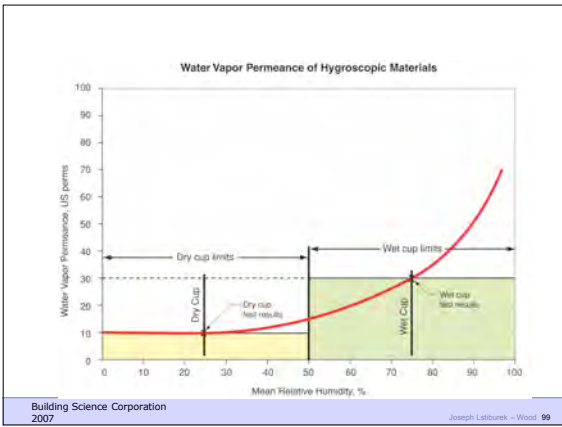
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Joseph Labarek - Wood 97



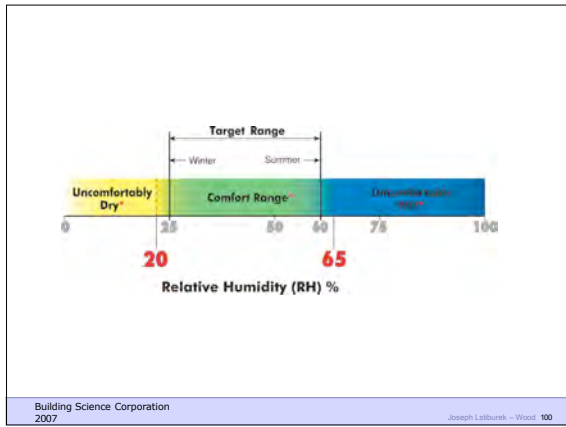
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Joseph Labarek - Wood 98



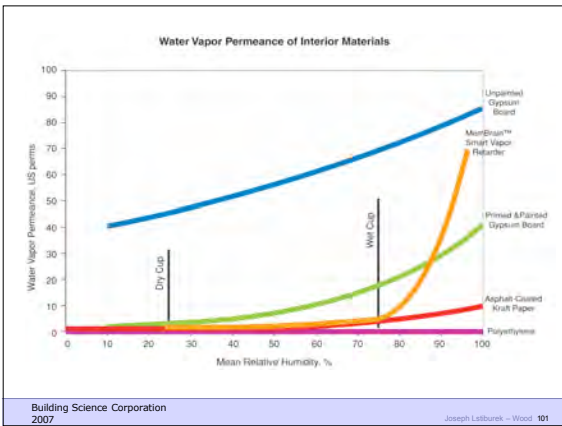
Building Science Corporation
2007

Joseph Labarek - Wood 99



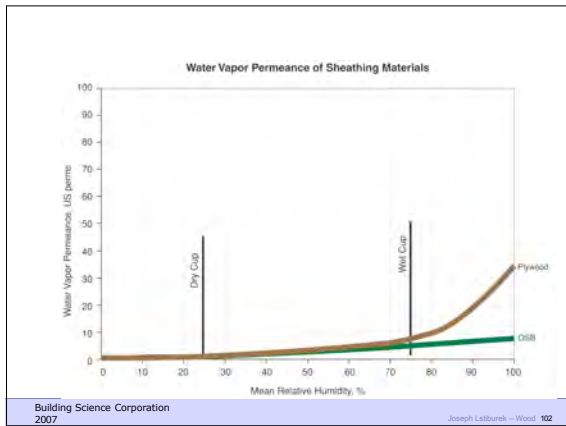
Building Science Corporation
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Joseph Labarek - Wood 100



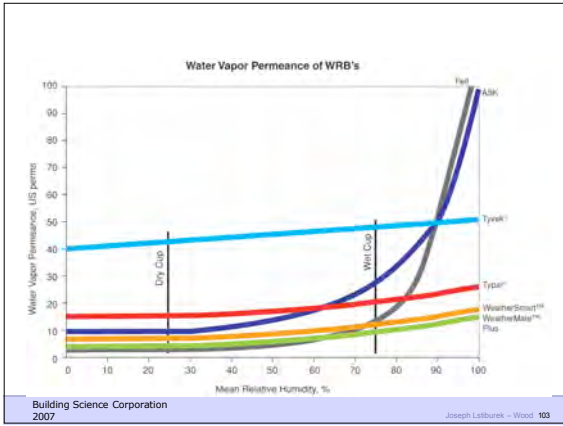
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Joseph Labarek - Wood 101



Building Science Corporation
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Joseph Labarek - Wood 102





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Joseph Lallburek - Wood 109



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Joseph Lallburek - Wood 110



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Joseph Lallburek - Wood 111



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Joseph Lallburek - Wood 112



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Joseph Lallburek - Wood 113



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Joseph Lallburek - Wood 114

