Joseph Lstiburek, Ph.D., P.Eng, ASHRAE Fellow

Building Science

Retrofit Case Studies

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Building Science Corporation Joseph Lstiburek 5

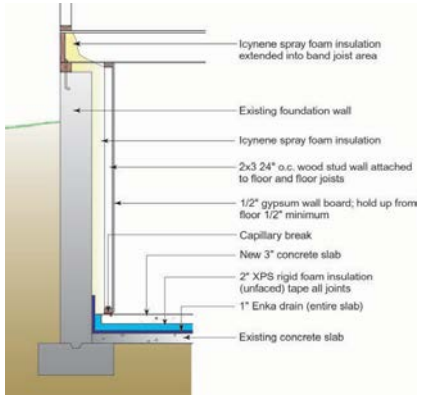
Building Science Corporation Joseph Lstiburek 6

Building Science Corporation Joseph Lstiburek 7

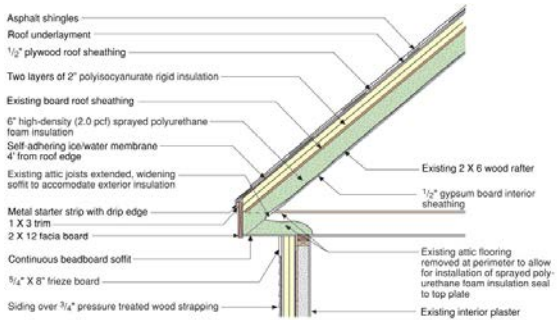
Building Science Corporation Joseph Lstiburek 8

Building Science Corporation Joseph Lstiburek 9

Building Science Corporation Joseph Lstiburek 10



Building Science Corporation Joseph Lstiburek 11



Building Science Corporation Joseph Lstiburek 12

Building Science Corporation Joseph Lstiburek 13

Building Science Corporation Joseph Lstiburek 14

Building Science Corporation Joseph Lstiburek 15

Building Science Corporation Joseph Lstiburek 16

Building Science Corporation Joseph Lstiburek 17

Building Science Corporation Joseph Lstiburek 18

Building Science Corporation Joseph Lstiburek 19

Building Science Corporation Joseph Lstiburek 20

Building Science Corporation Joseph Lstiburek 21

Building Science Corporation Joseph Lstiburek 22

Building Science Corporation Joseph Lstiburek 23

Building Science Corporation Joseph Lstiburek 24

Building Science Corporation
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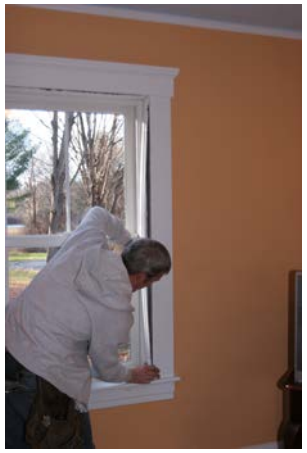
Building Science Corporation
Joseph Lstiburek 26

Building Science Corporation
Joseph Lstiburek 27

Building Science Corporation
Joseph Lstiburek 28



Building Science Corporation Joseph Lstiburek 29

Building Science Corporation Joseph Lstiburek 30

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Building Science Corporation Joseph Lstiburek 35

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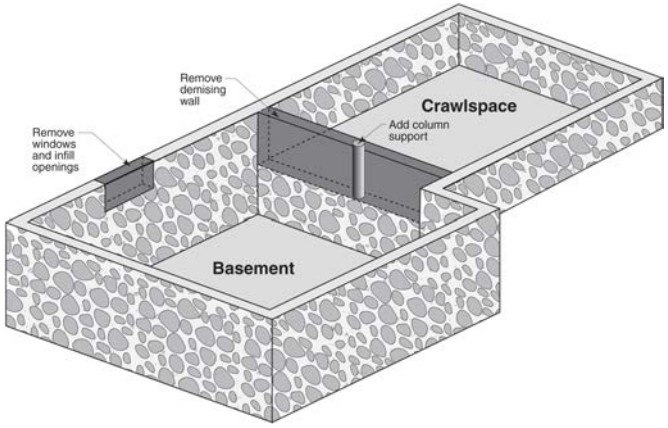
Building Science Corporation Joseph Lstiburek 46



Building Science Corporation Joseph Lstiburek 47

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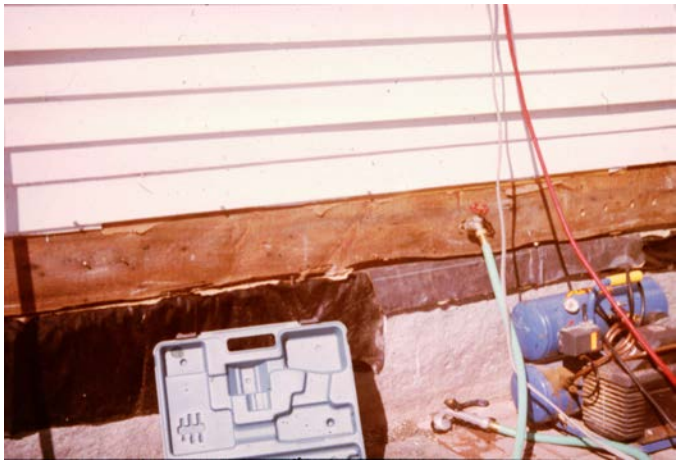

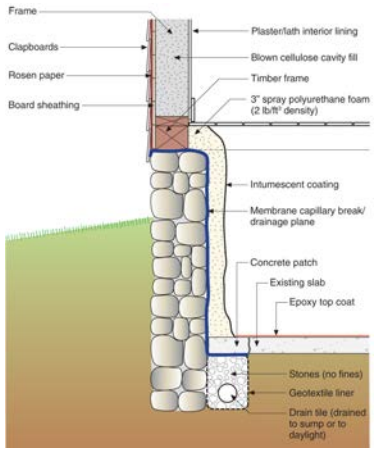
Frame
Clapboards
Rosen paper
Board sheathing
Plaster/lath interior lining
Blown cellulose cavity fill
Timber frame
3" spray polyurethane foam (2 lb/ft³ density)
Intumescent coating
Membrane capillary break/ drainage plane
Concrete patch
Existing slab
Epoxy top coat
Stones (no fines)
Geotextile liner
Drain tile (drained to sump or to daylight)

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Joseph Lstiburek 53

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Joseph Lstiburek 56

Building Science Corporation Joseph Lstiburek 57

Building Science Corporation Joseph Lstiburek 58

Building Science Corporation Joseph Lstiburek 59

Building Science Corporation Joseph Lstiburek 60

Building Science Corporation
Joseph Lstiburek 61

Building Science Corporation
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Building Science Corporation
Joseph Lstiburek 63

Building Science Corporation
Joseph Lstiburek 64

Building Science Corporation Joseph Lstiburek 65

Building Science Corporation Joseph Lstiburek 66

Building Science Corporation Joseph Lstiburek 67

Building Science Corporation Joseph Lstiburek 68

Building Science Corporation Joseph Lstiburek 69

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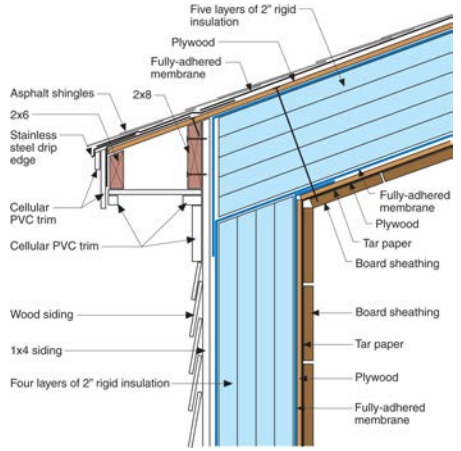
Building Science Corporation Joseph Lstiburek 79



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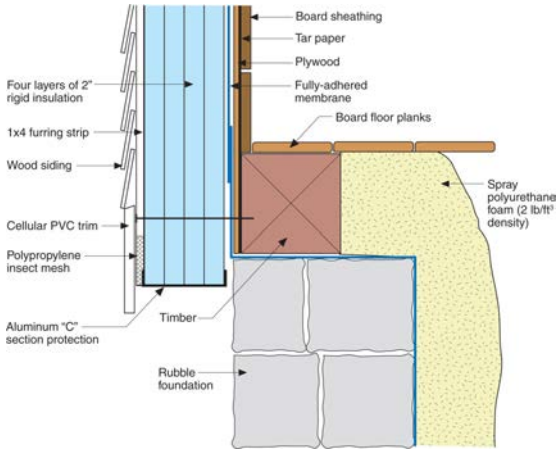

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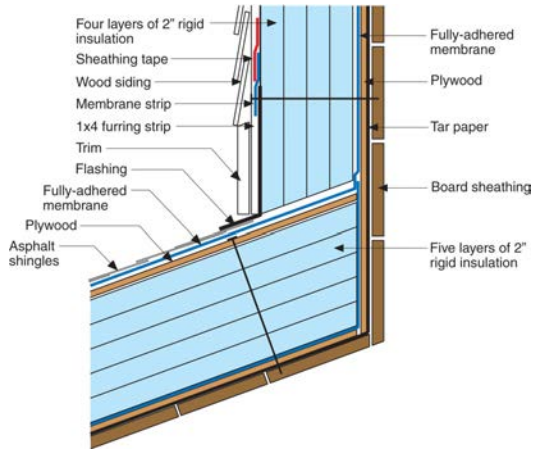

Building Science Corporation Joseph Lstiburek 82

Building Science Corporation Joseph Lstiburek 83

Building Science Corporation Joseph Lstiburek 84

Building Science Corporation Joseph Lstiburek 85

Building Science Corporation Joseph Lstiburek 86

Building Science Corporation Joseph Lstiburek 87

Building Science Corporation Joseph Lstiburek 88

Building Science Corporation
Joseph Lstiburek 89

Building Science Corporation
Joseph Lstiburek 90

Building Science Corporation
Joseph Lstiburek 91

Building Science Corporation
Joseph Lstiburek 92

Building Science Corporation

Joseph Lstiburek 93

Building Science Corporation

Joseph Lstiburek - Walls and Windows 94

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Joseph Lstiburek - Walls and Windows 95

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Joseph Lstiburek - Walls and Windows 96

Building Science Corporation
Joseph Lstiburek 97

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Joseph Lstiburek - Walls and Windows 99

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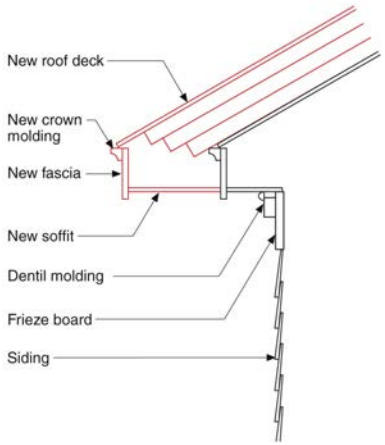
Joseph Lstiburek - Walls and Windows 100



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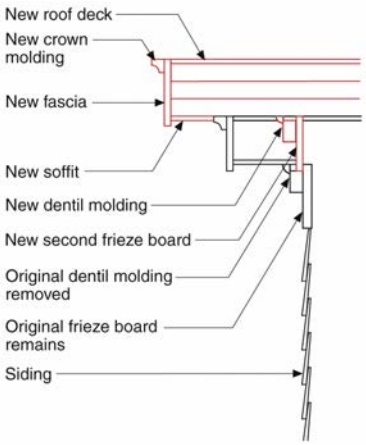
Joseph Lstiburek - Walls and Windows 101



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Joseph Lstiburek 103

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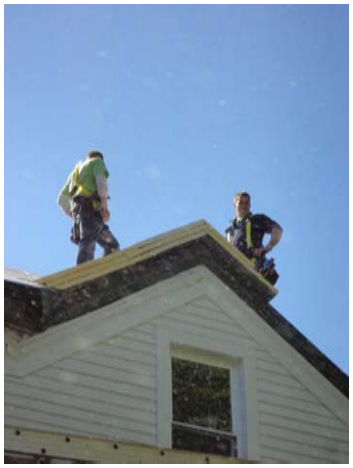
Joseph Lstiburek 104



Building Science Corporation
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Joseph Lstiburek - Walls and Windows 106

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Joseph Lstiburek - Walls and Windows 107

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Joseph Lstiburek - Walls and Windows 108

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Joseph Lstiburek - Walls and Windows 109

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Joseph Lstiburek - Walls and Windows 112

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Joseph Lstiburek - Walls and Windows 113

Building Science Corporation

Joseph Lstiburek - Walls and Windows 114