

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

Building Science

Retrofit Case Studies

presented by www.buildingscience.com



Building Science Corporation

Joseph Lstiburek 2



Building Science Corporation

Joseph Lstiburek 3



Building Science Corporation

Joseph Lstiburek 4



Building Science Corporation

Joseph Lstiburek 5



Building Science Corporation

Joseph Lstiburek 6



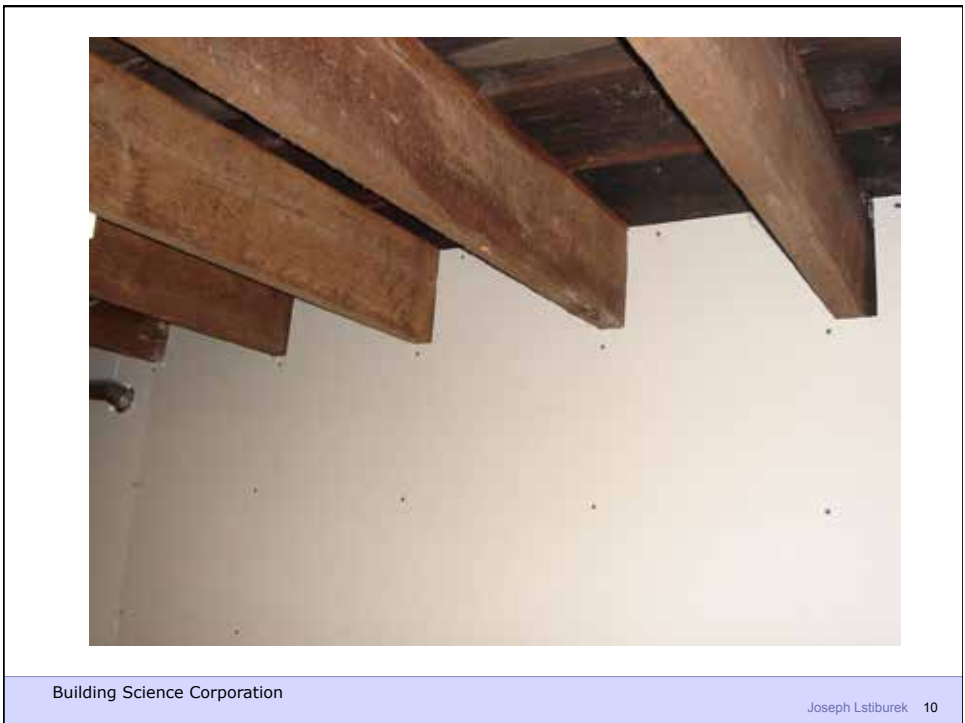
Building Science Corporation

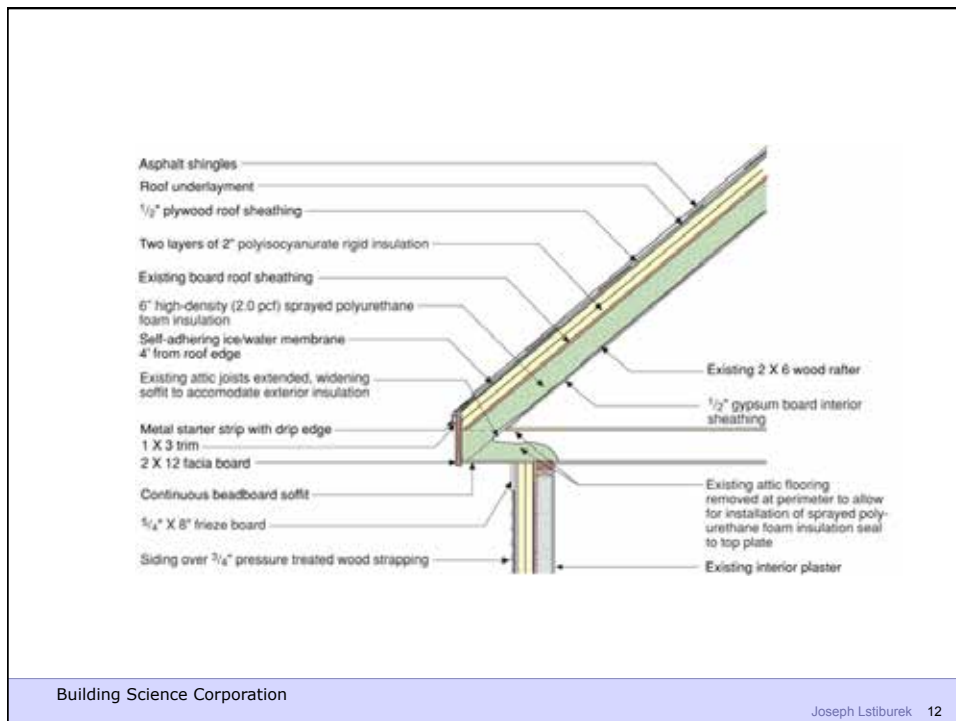
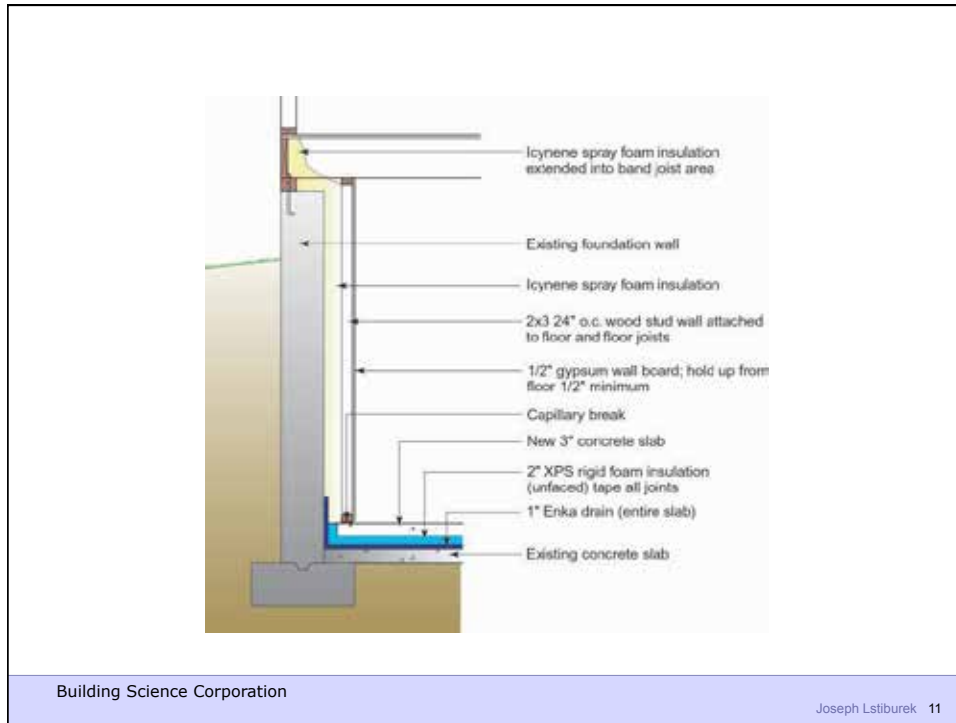
Joseph Lstiburek 7



Building Science Corporation

Joseph Lstiburek 8







Building Science Corporation

Joseph Lstiburek 13



Building Science Corporation

Joseph Lstiburek 14



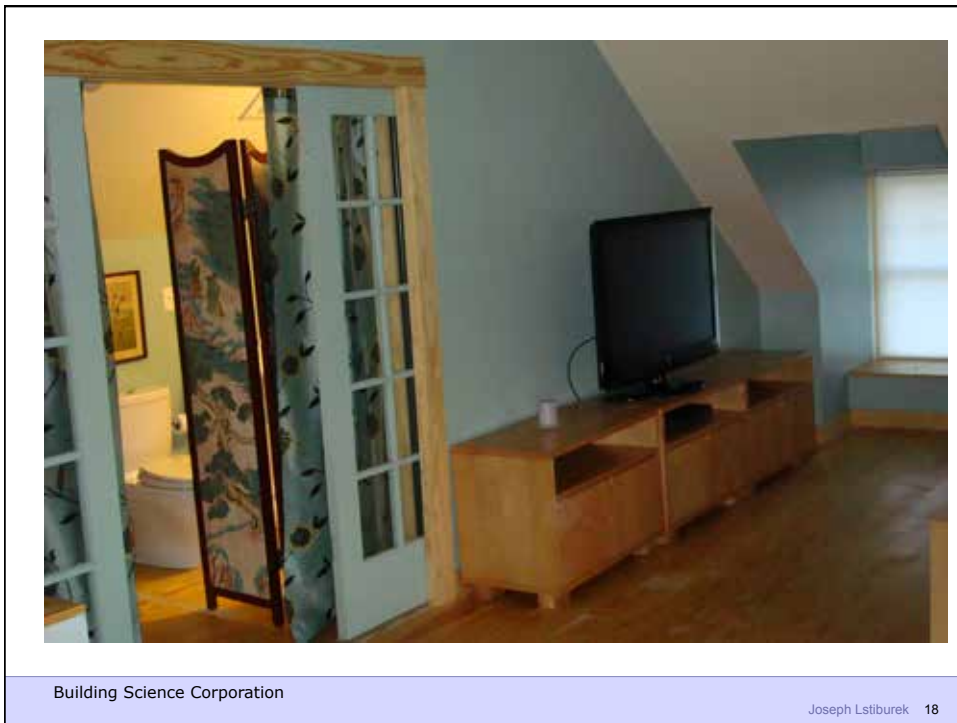
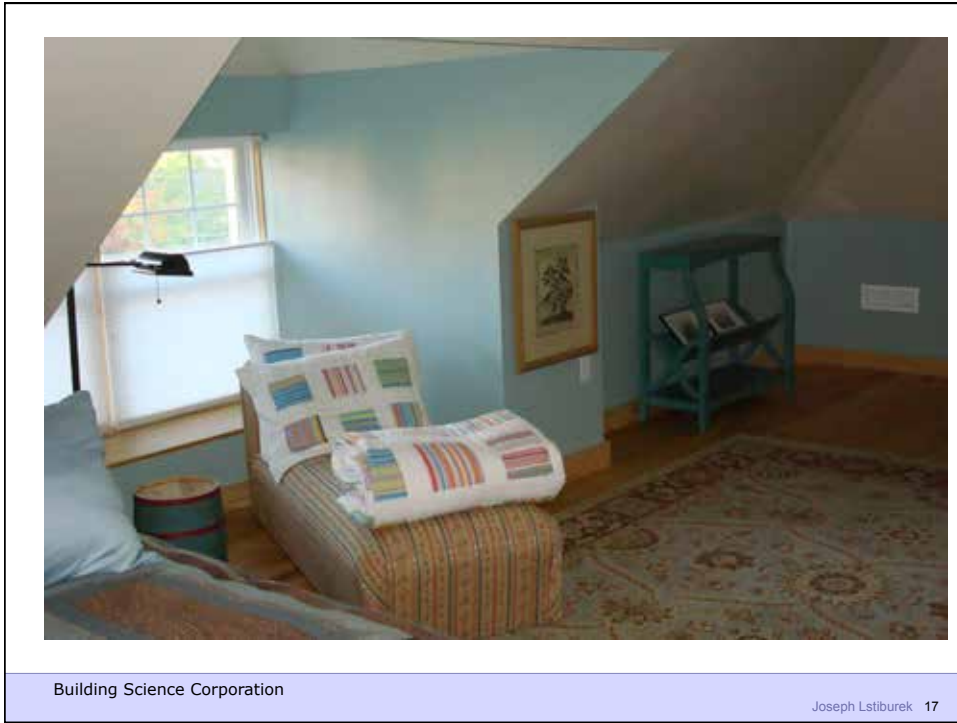
Building Science Corporation

Joseph Lstiburek 15



Building Science Corporation

Joseph Lstiburek 16





Building Science Corporation

Joseph Lstiburek 19



Building Science Corporation

Joseph Lstiburek 20



Building Science Corporation

Joseph Lstiburek 21



Building Science Corporation

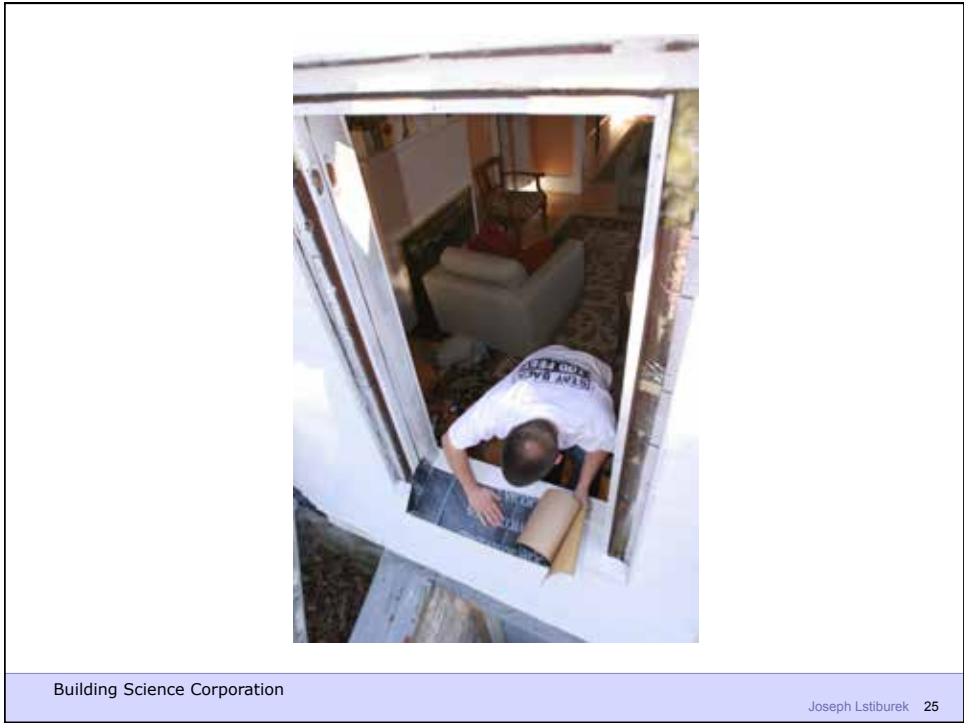
Joseph Lstiburek 22



Building Science Corporation



Building Science Corporation





Building Science Corporation

Joseph Lstiburek 27



Building Science Corporation

Joseph Lstiburek 28



Building Science Corporation

Joseph Lstiburek 29



Building Science Corporation

Joseph Lstiburek 30



Building Science Corporation



Building Science Corporation



Building Science Corporation



Building Science Corporation



Building Science Corporation



Building Science Corporation



Building Science Corporation

Joseph Lstiburek 37



Building Science Corporation

Joseph Lstiburek 38



Building Science Corporation



Building Science Corporation



Building Science Corporation

Joseph Lstiburek 41



Building Science Corporation

Joseph Lstiburek 42



Building Science Corporation

Joseph Lstiburek 43



Building Science Corporation

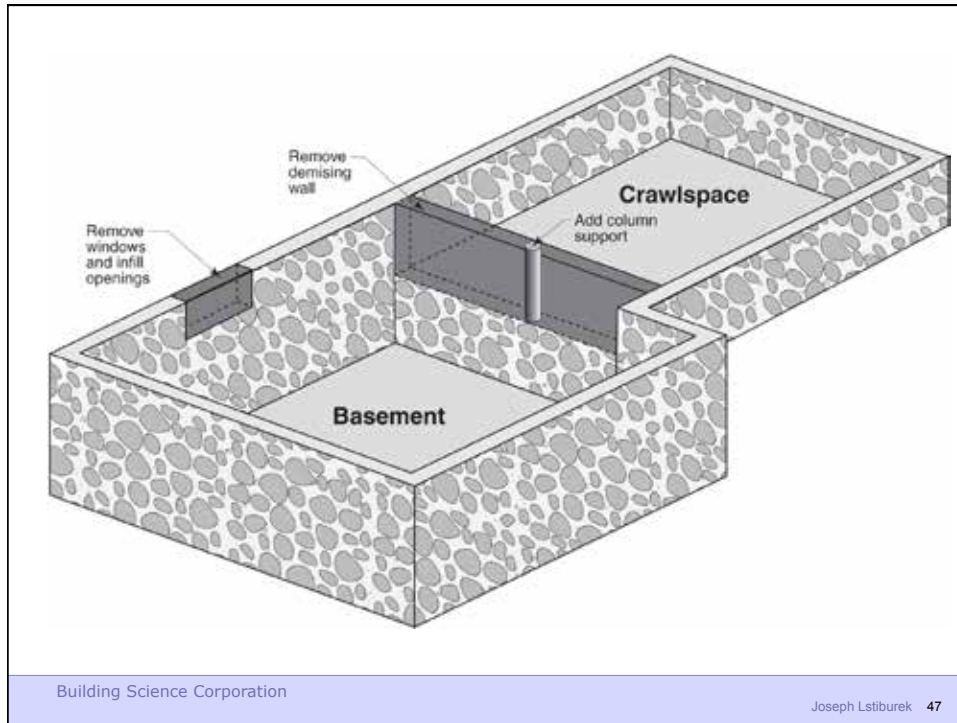
Joseph Lstiburek 44



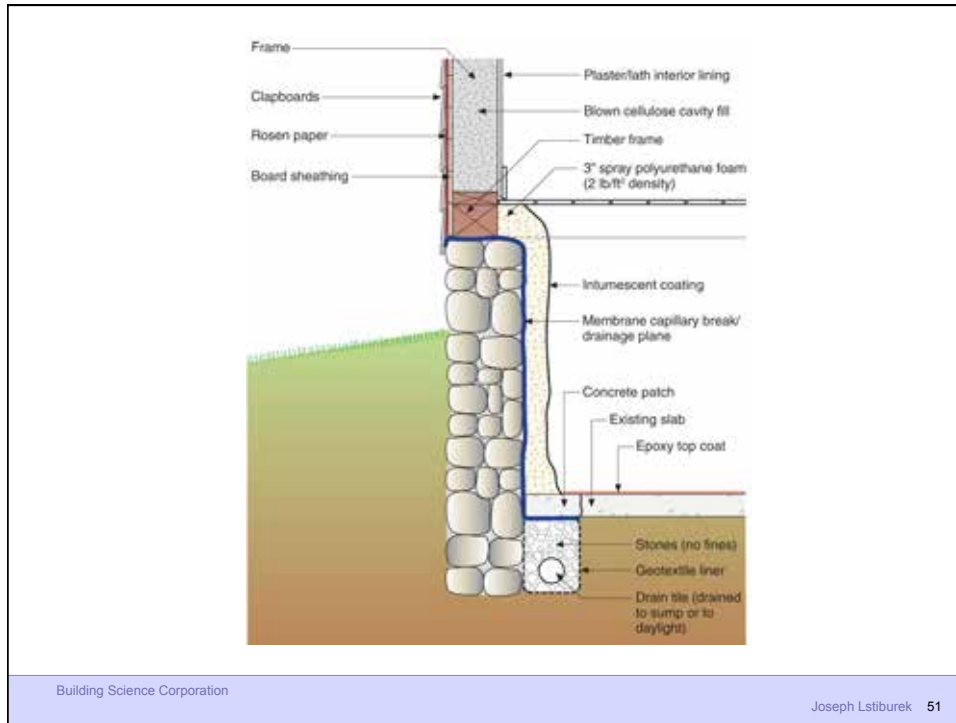
Building Science Corporation



Building Science Corporation











Building Science Corporation

Joseph Lstiburek 55



Building Science Corporation

Joseph Lstiburek 56











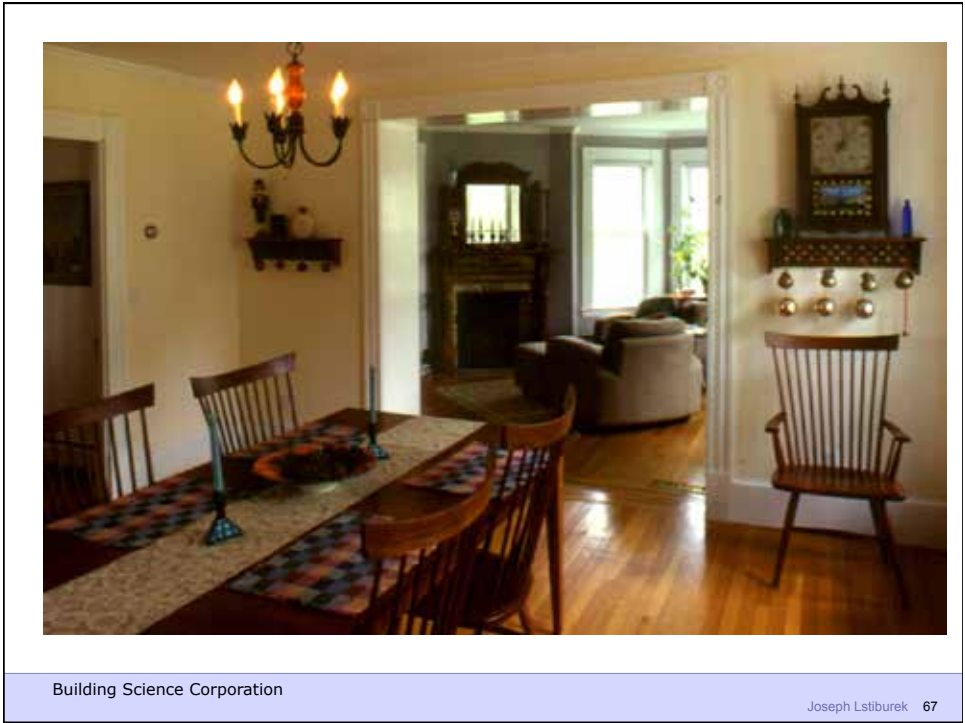
Building Science Corporation

Joseph Lstiburek 65



Building Science Corporation

Joseph Lstiburek 66







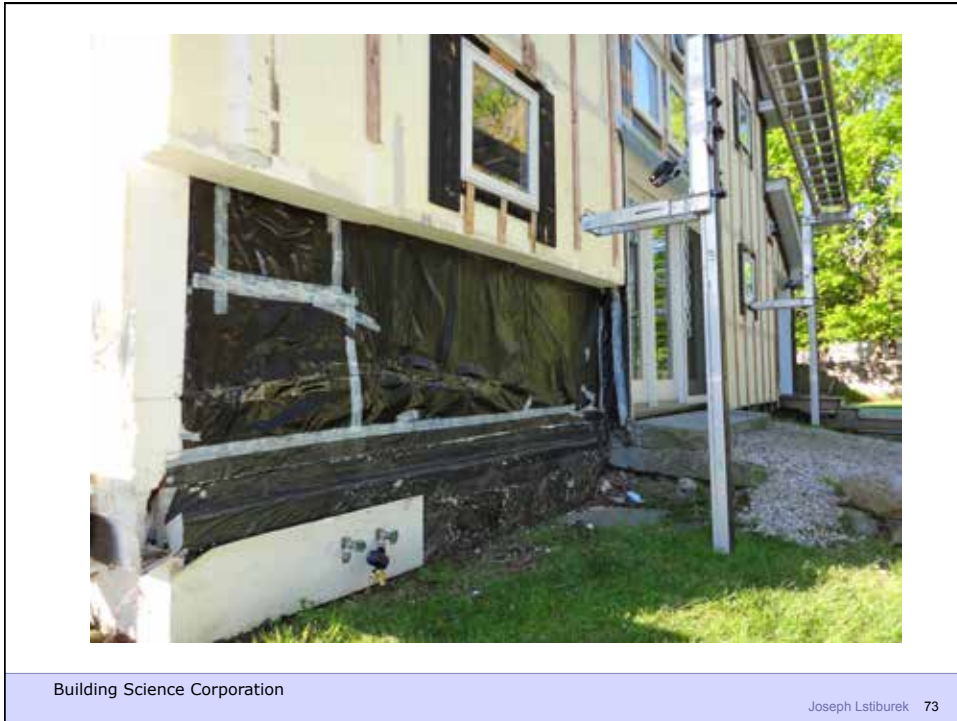
Building Science Corporation

Joseph Lstiburek 71



Building Science Corporation

Joseph Lstiburek 72







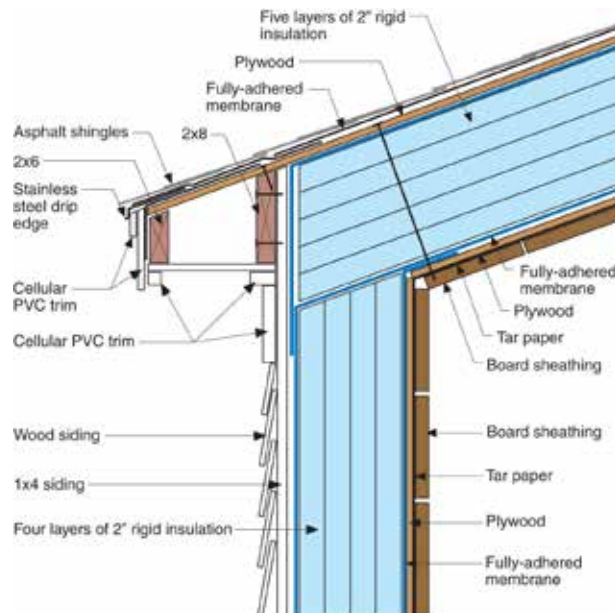
Building Science Corporation



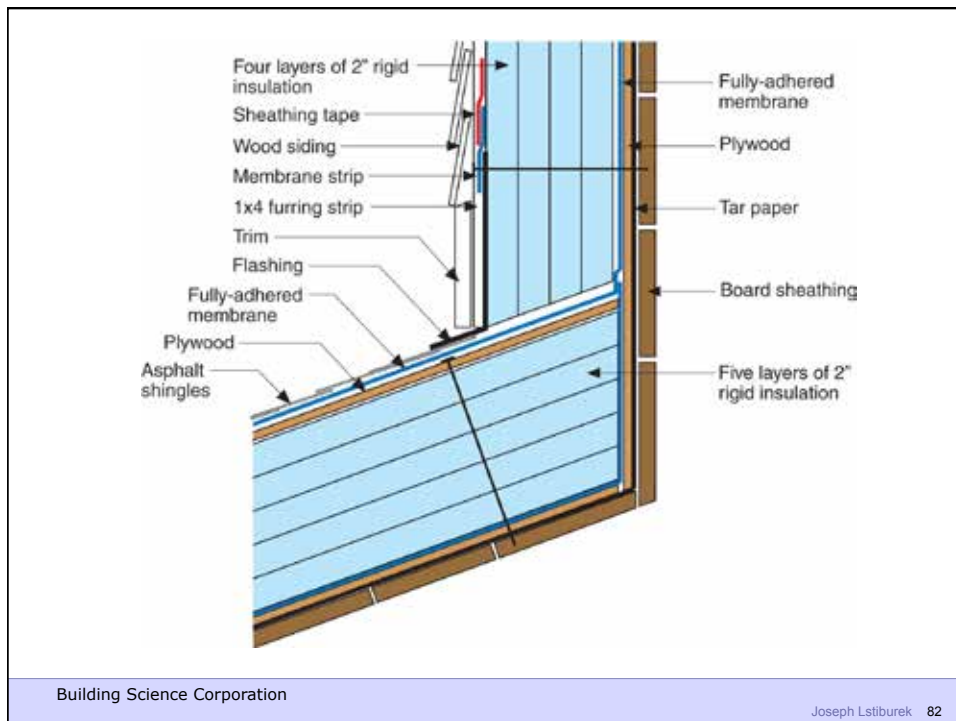
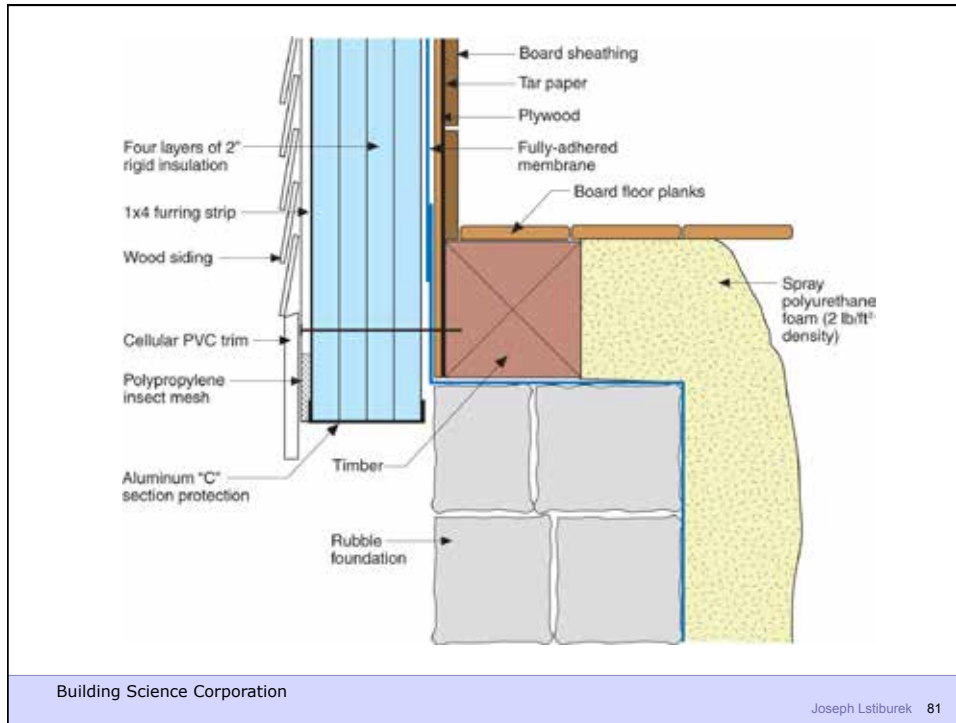
Building Science Corporation



Building Science Corporation

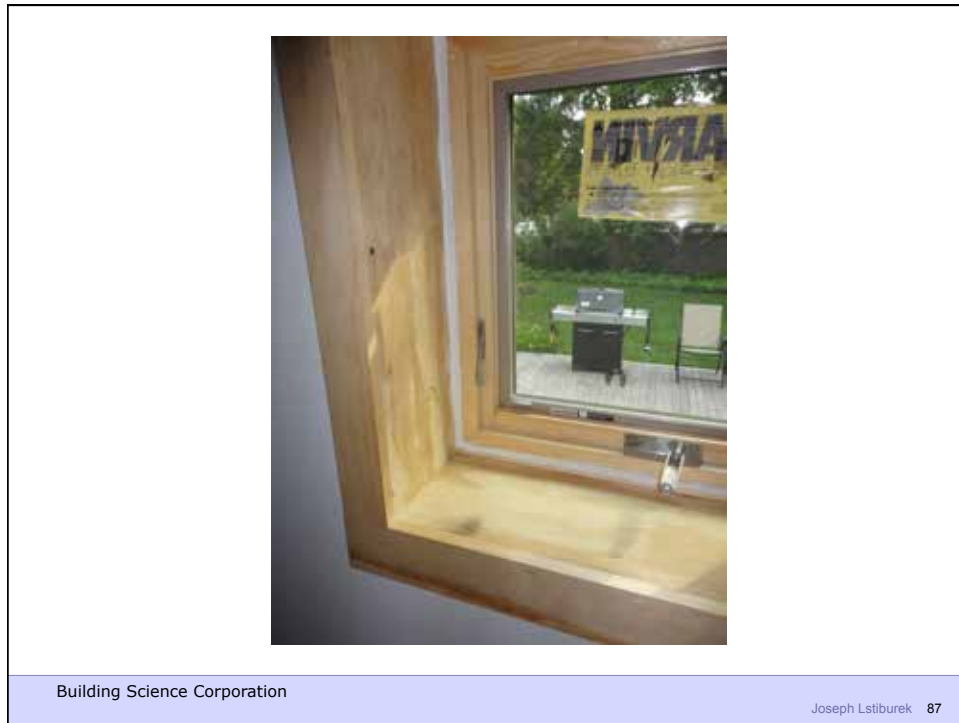


Building Science Corporation











Building Science Corporation



Building Science Corporation



Building Science Corporation

Joseph Lstiburek 91



Building Science Corporation

Joseph Lstiburek 92



Building Science Corporation



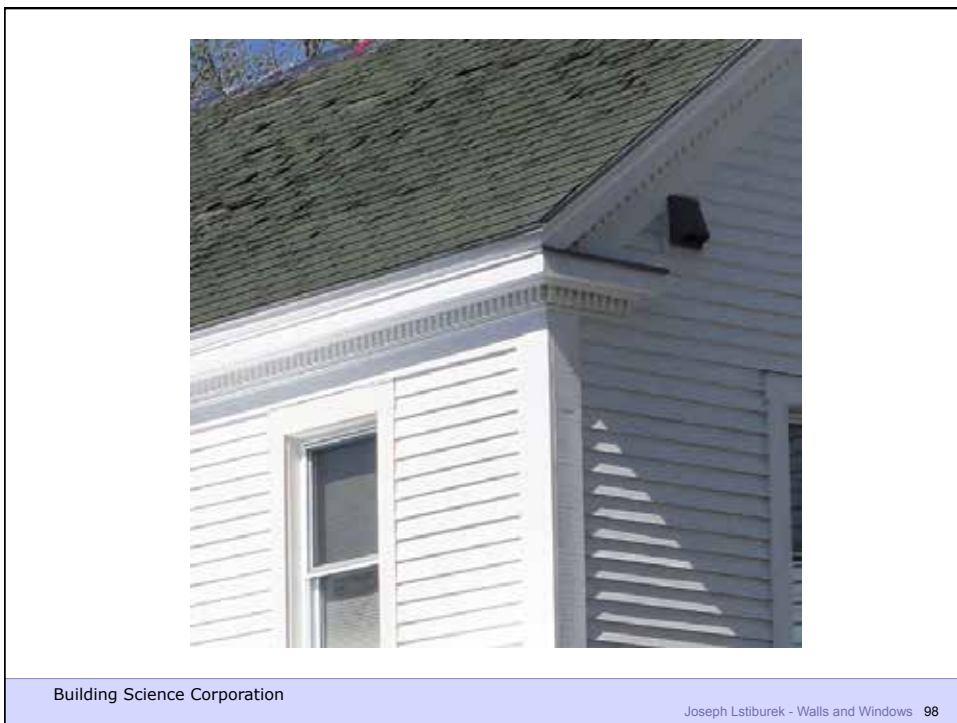
Building Science Corporation



Building Science Corporation



Building Science Corporation

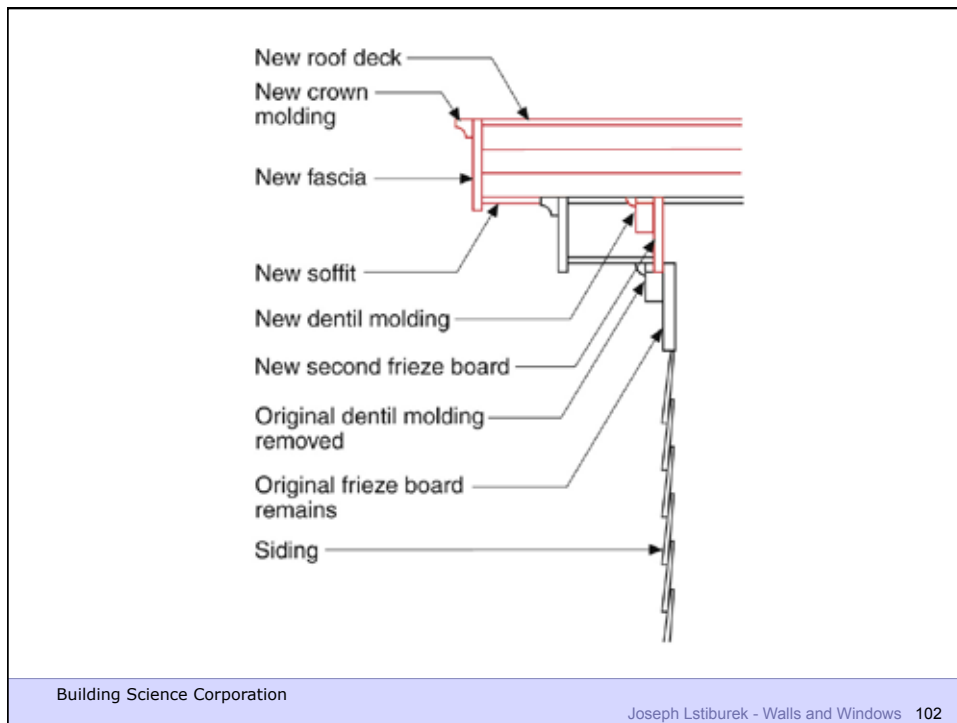
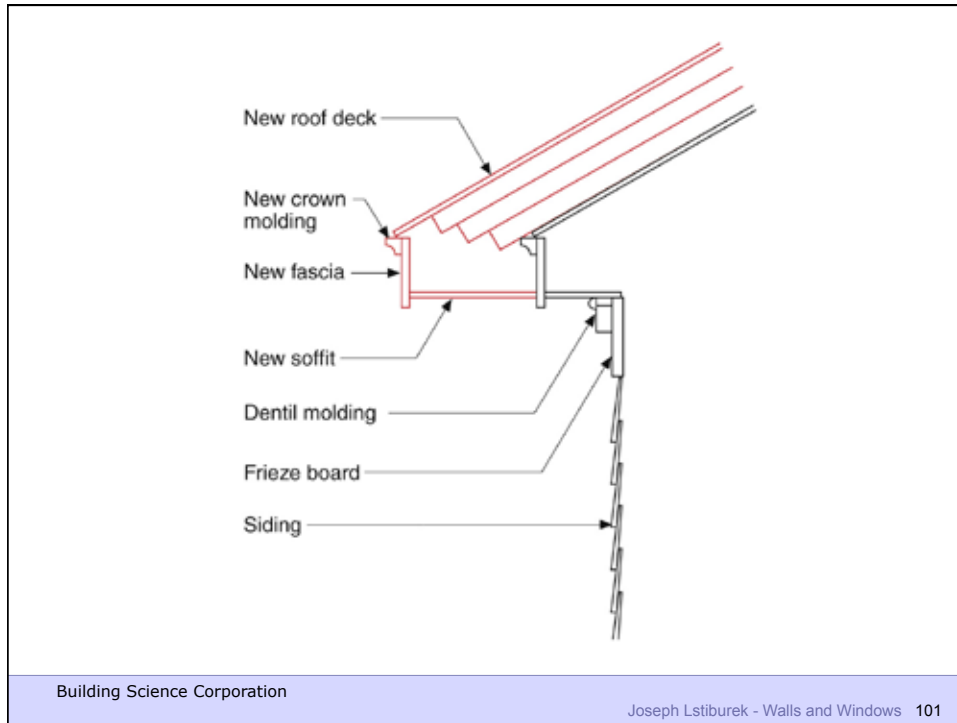


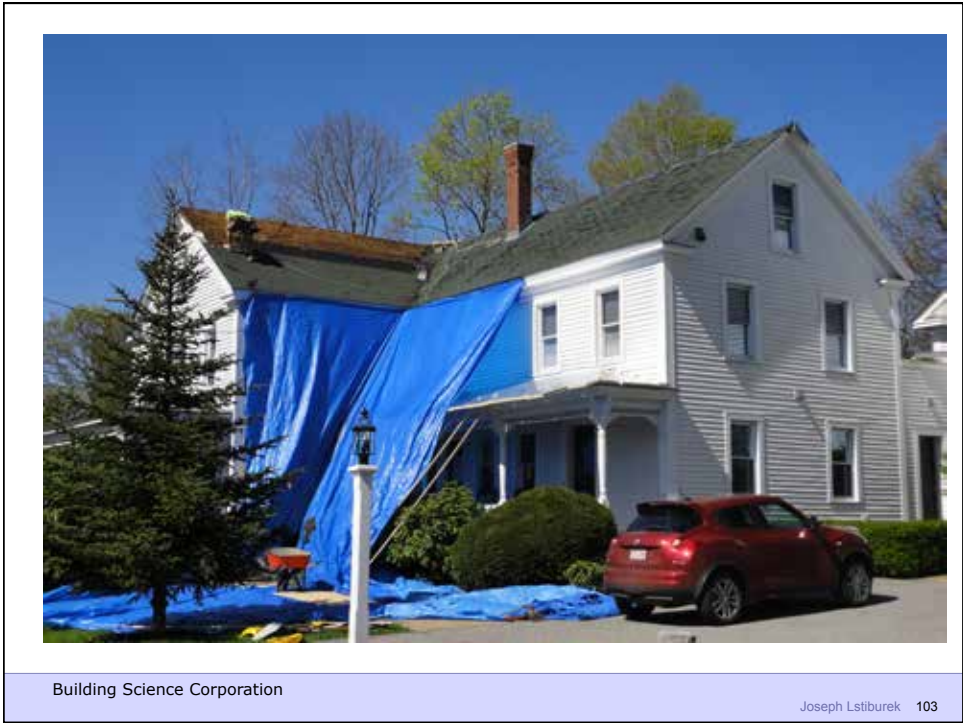


Building Science Corporation



Building Science Corporation







Building Science Corporation



Building Science Corporation



Building Science Corporation

Joseph Lstiburek - Walls and Windows 107



Building Science Corporation

Joseph Lstiburek - Walls and Windows 108



Building Science Corporation



Building Science Corporation



Building Science Corporation



Building Science Corporation



Building Science Corporation



Building Science Corporation