

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

# Building Science

Adventures In Building Science

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## 2<sup>nd</sup> Law of Thermodynamics

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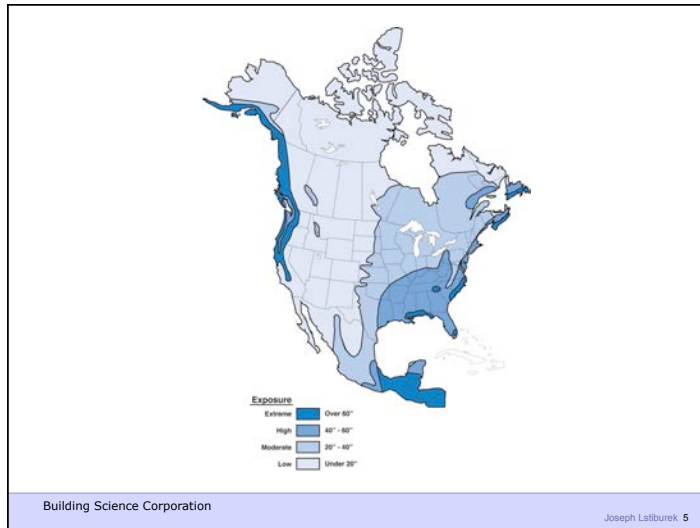
Heat Flow Is From Warm To Cold  
Moisture Flow Is From Warm To Cold  
Moisture Flow Is From More To Less  
Air Flow Is From A Higher Pressure to a Lower Pressure  
Gravity Acts Down

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Joseph Lstiburek 3

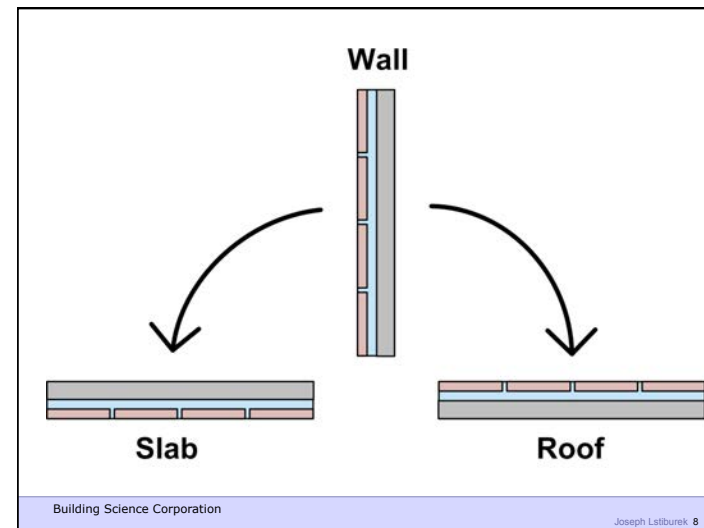
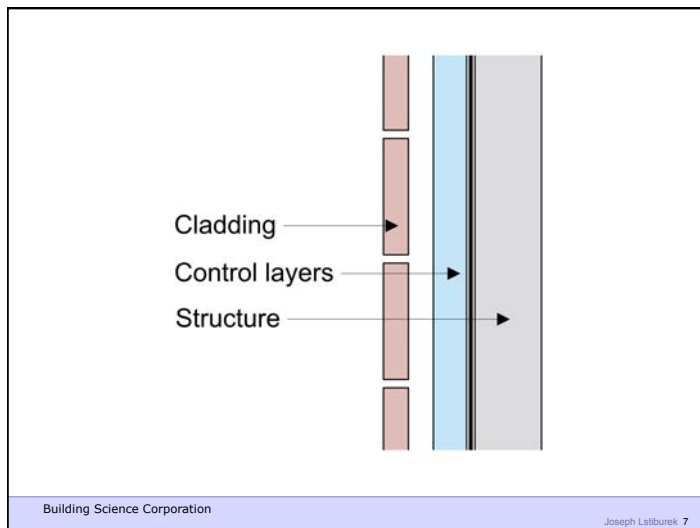
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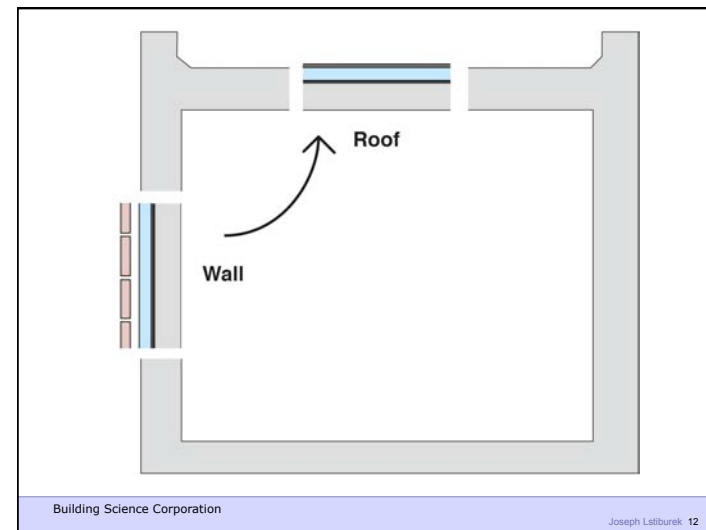
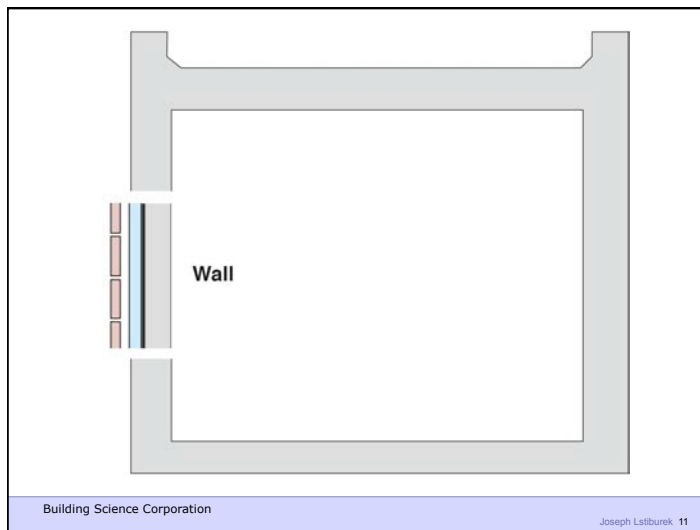
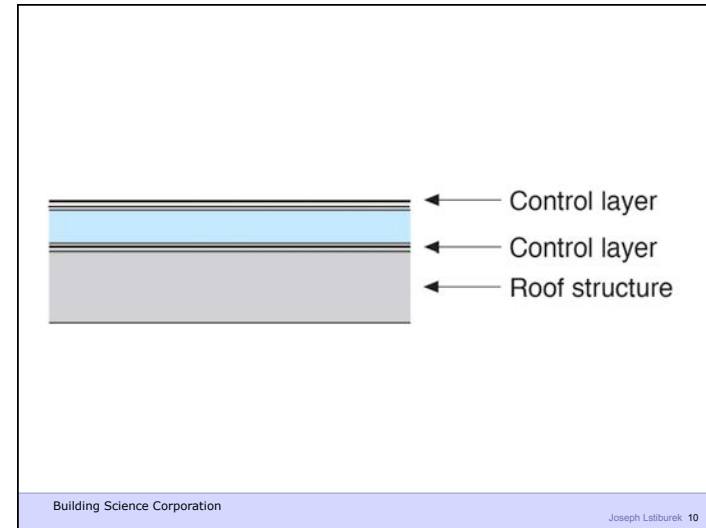
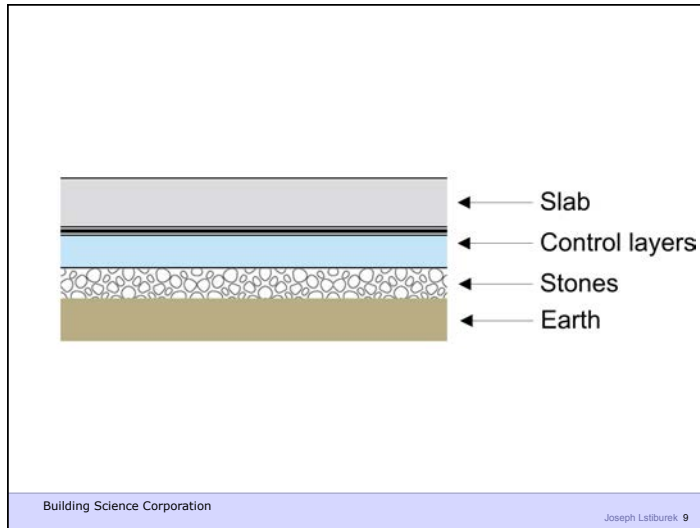
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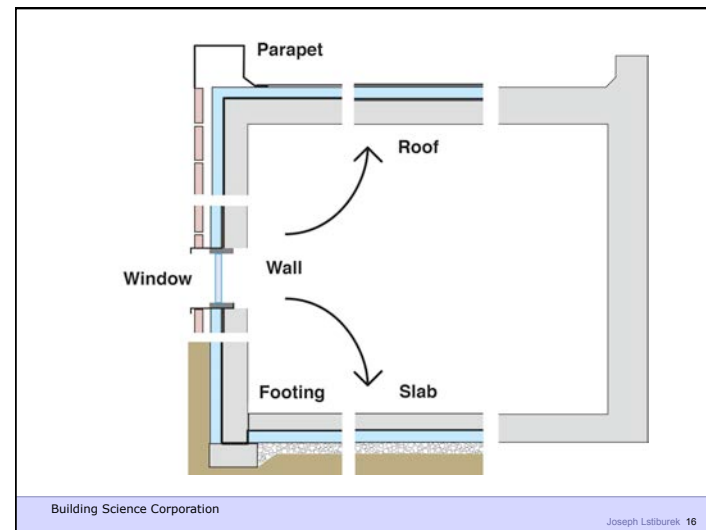
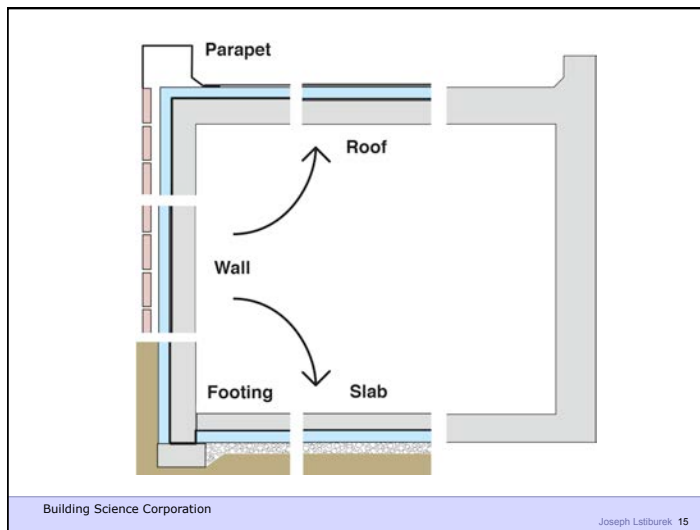
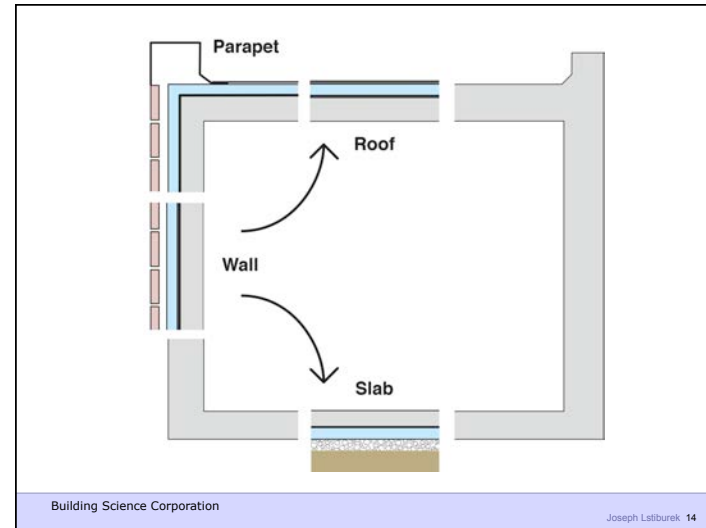
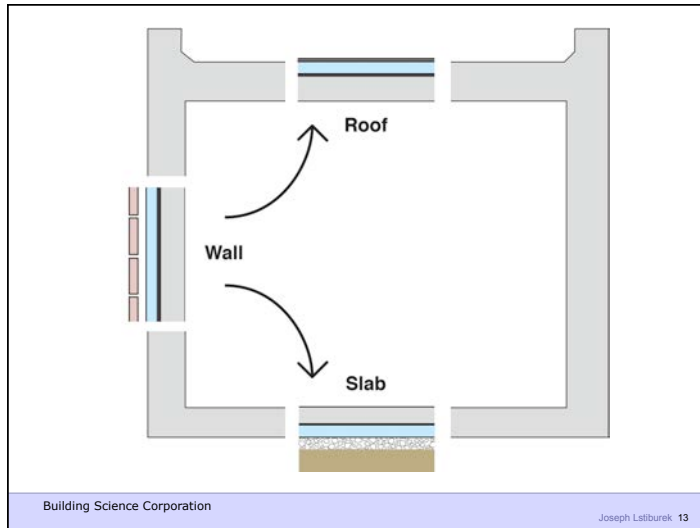


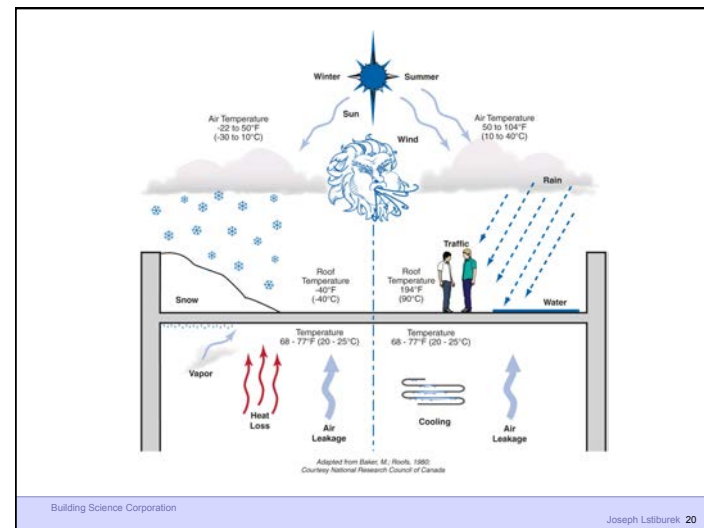
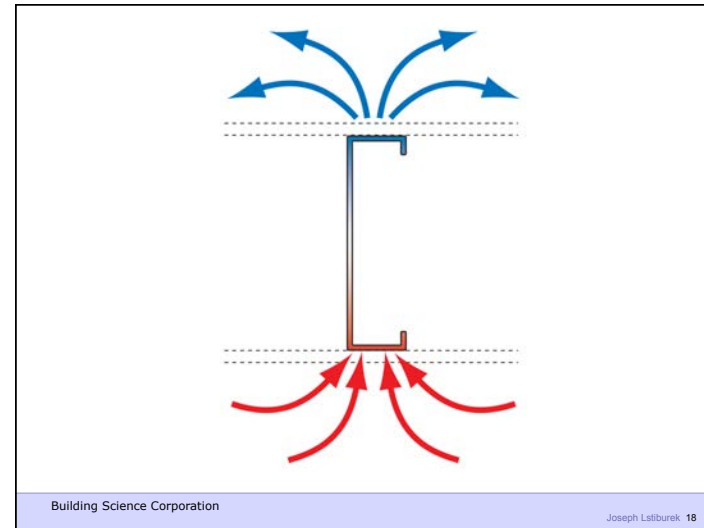
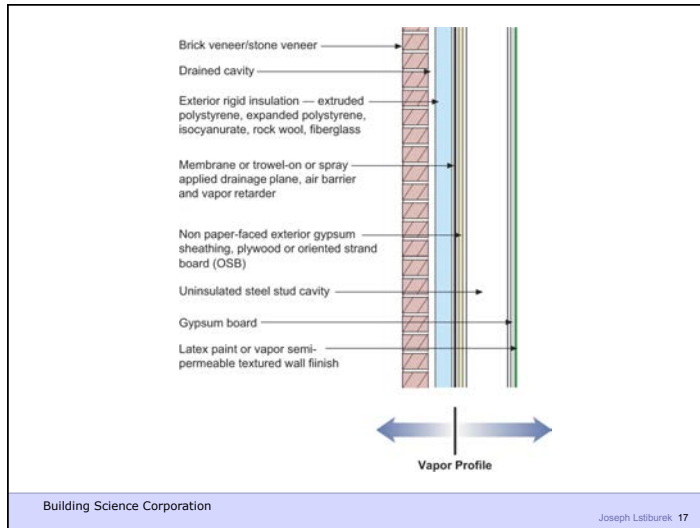
Water Control Layer  
 Air Control Layer  
 Vapor Control Layer  
 Thermal Control Layer

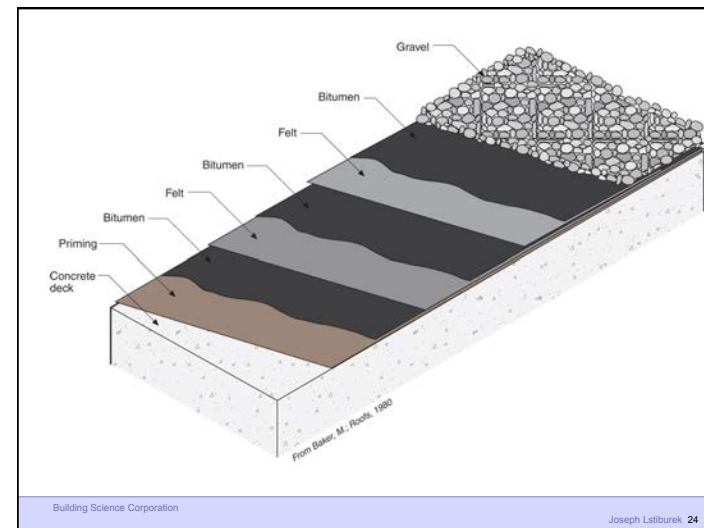
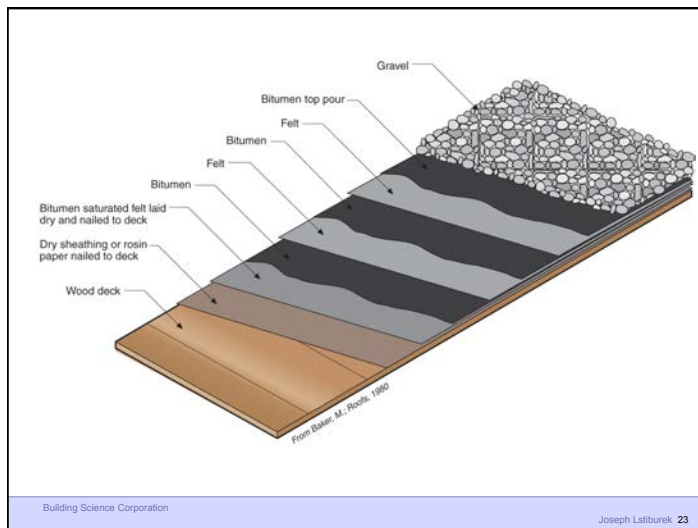
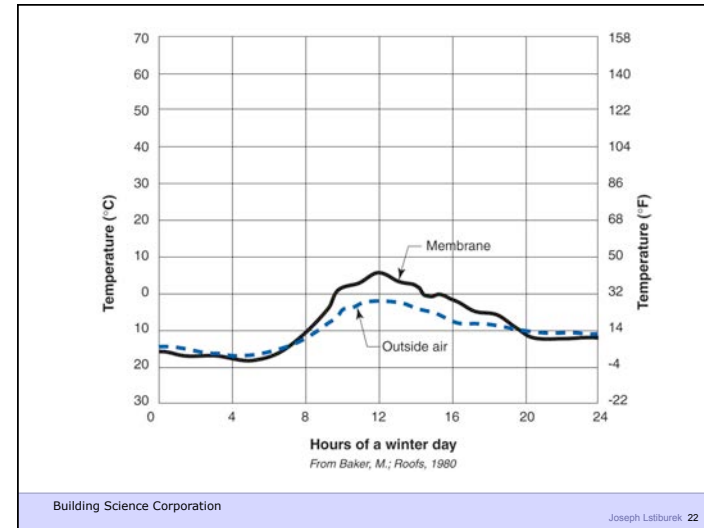
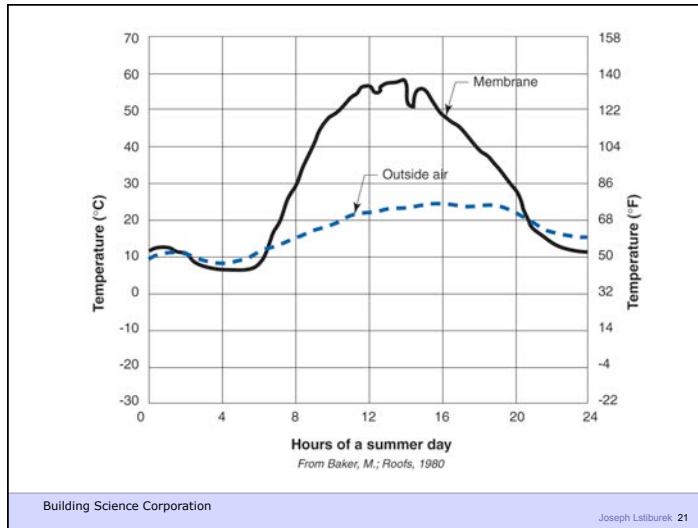
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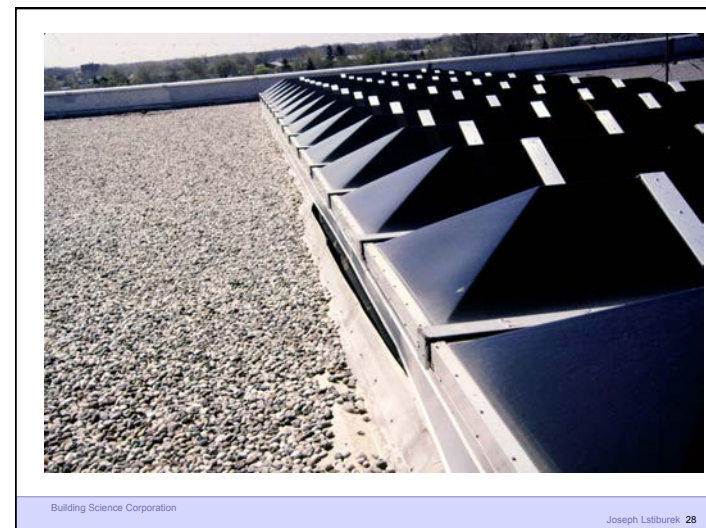
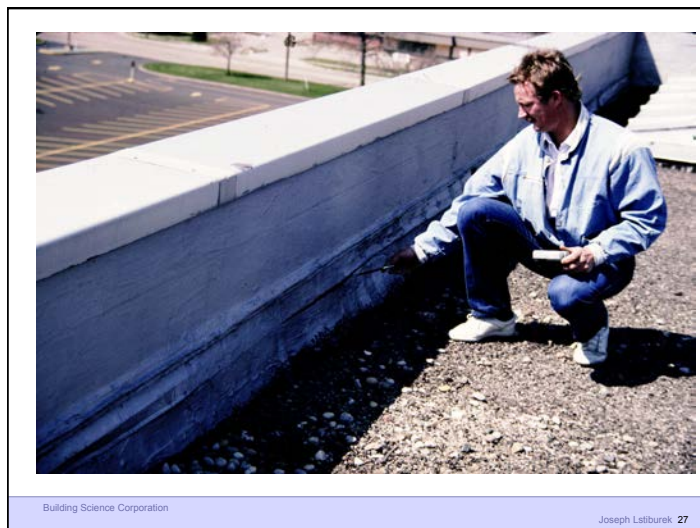
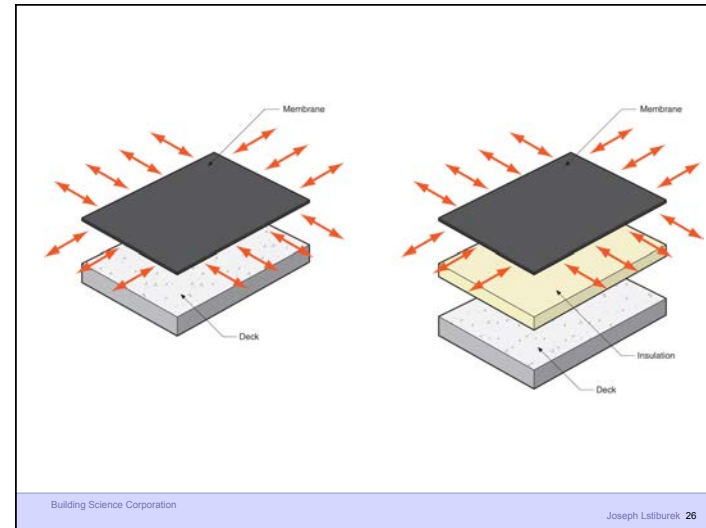
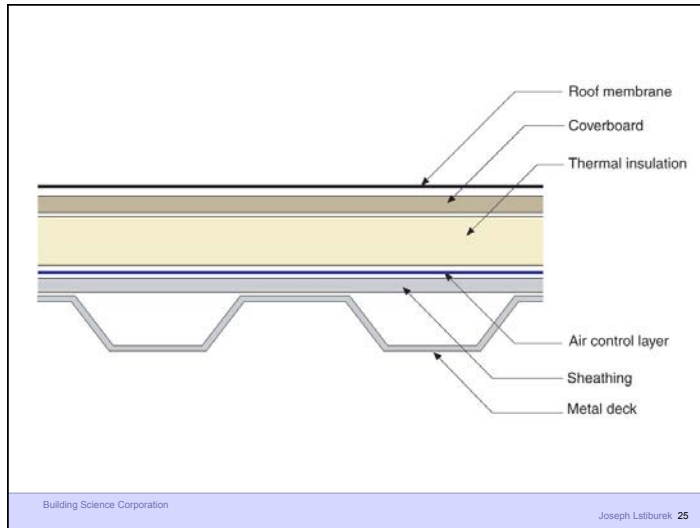


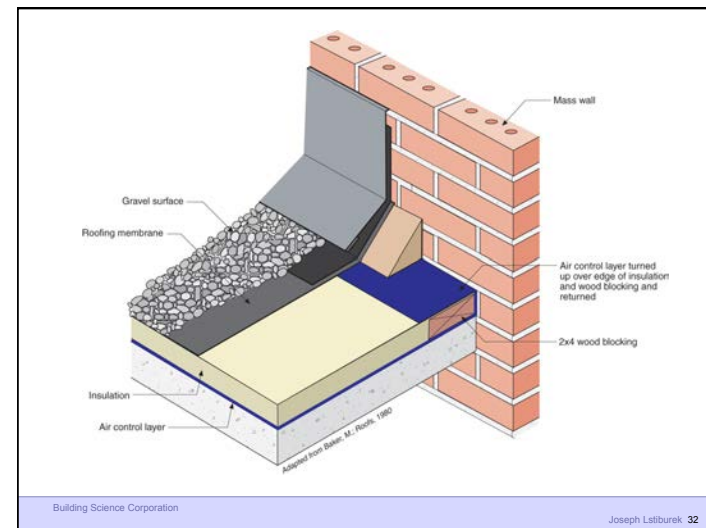
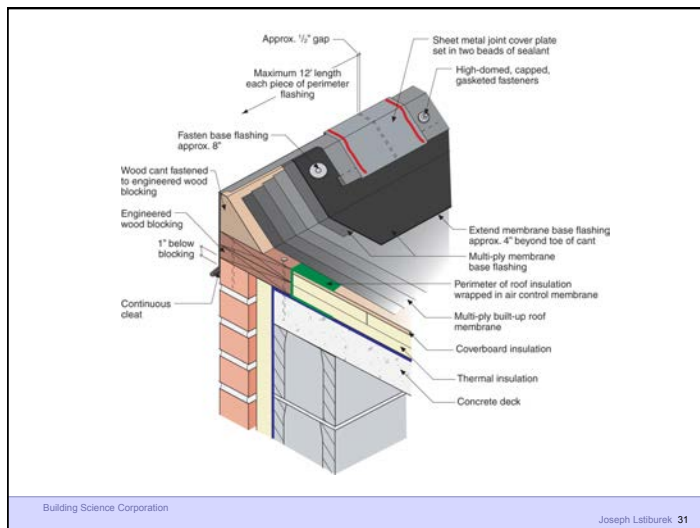
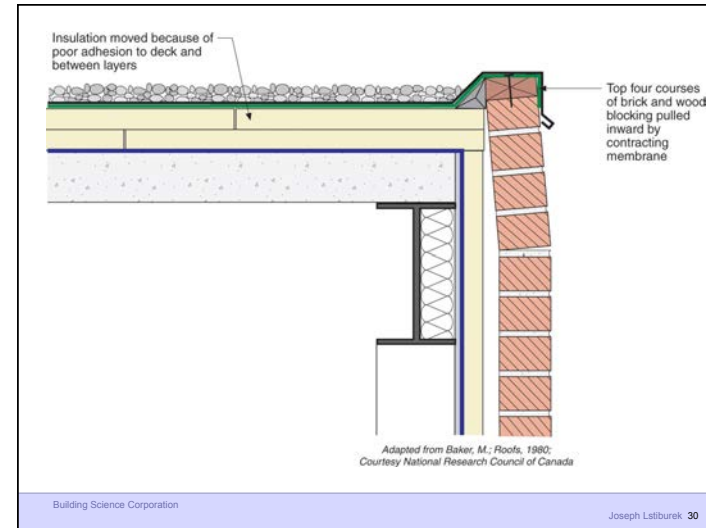
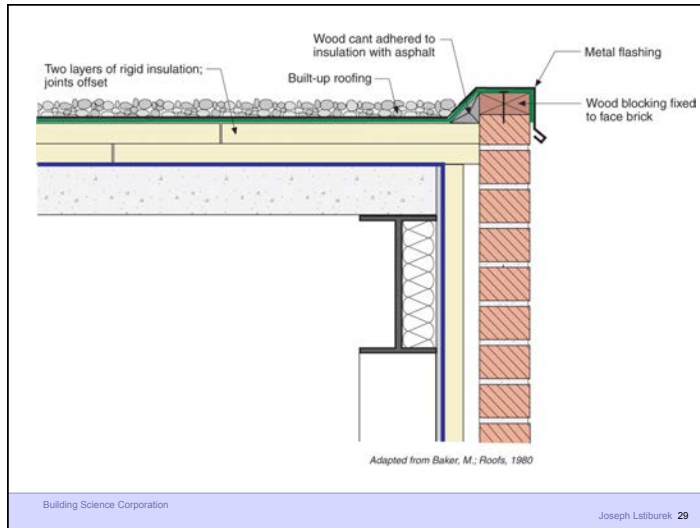




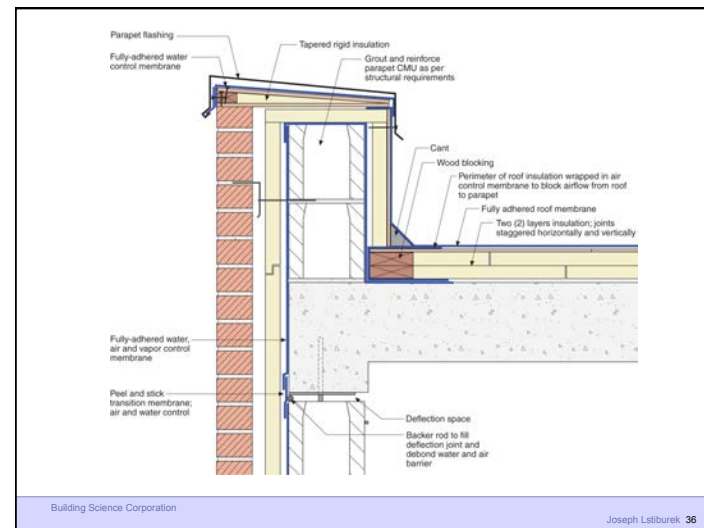
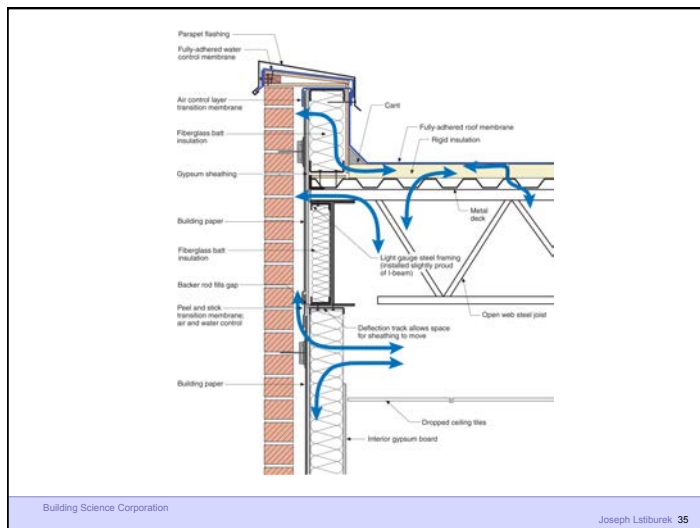
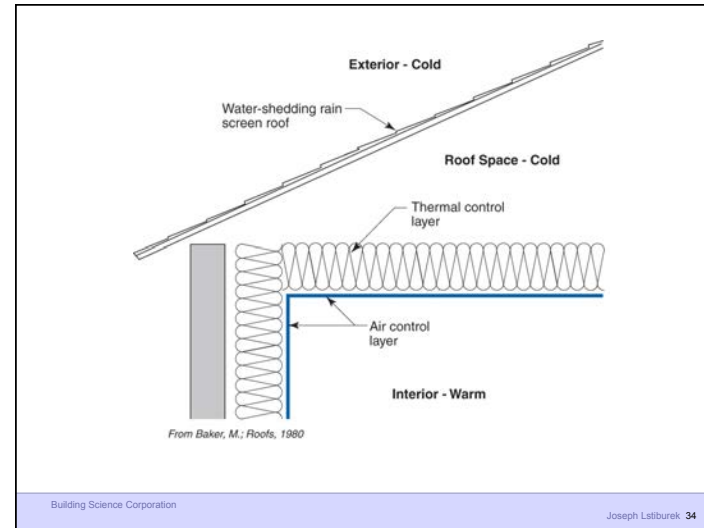
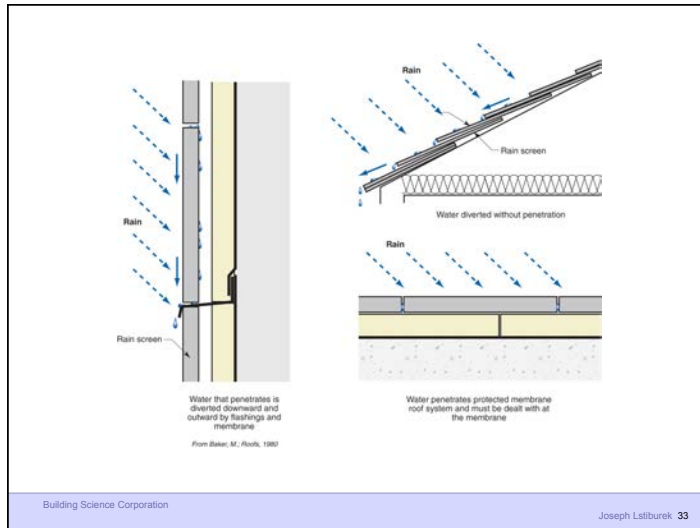


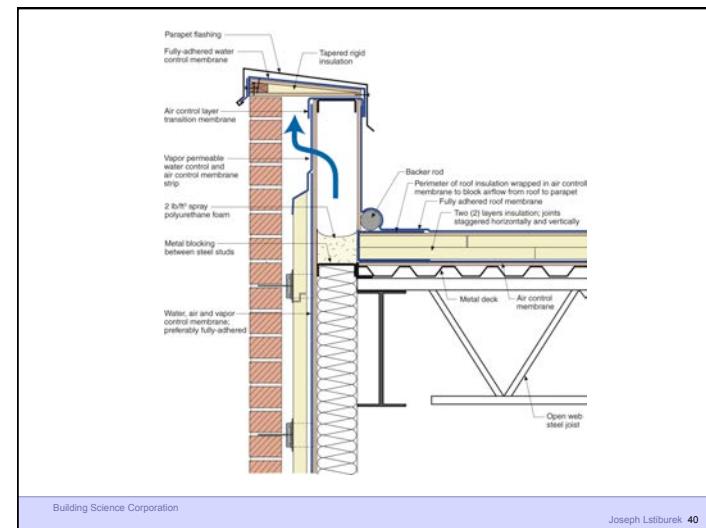
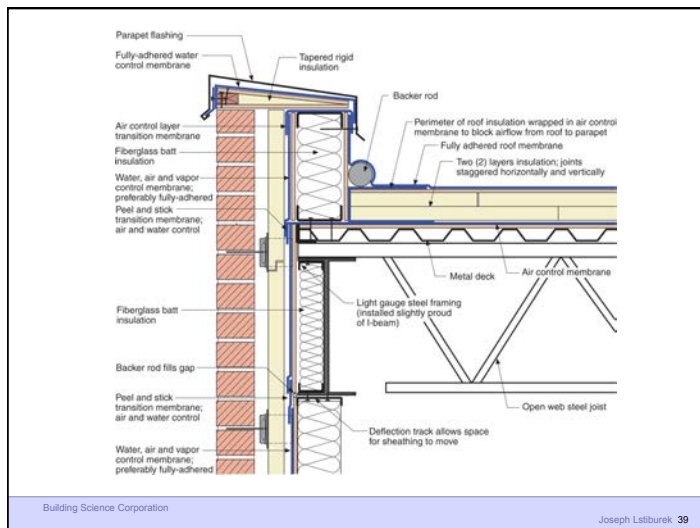
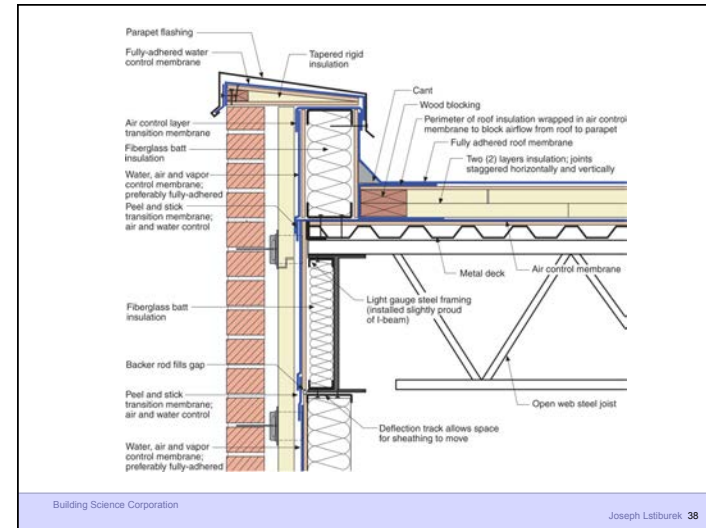
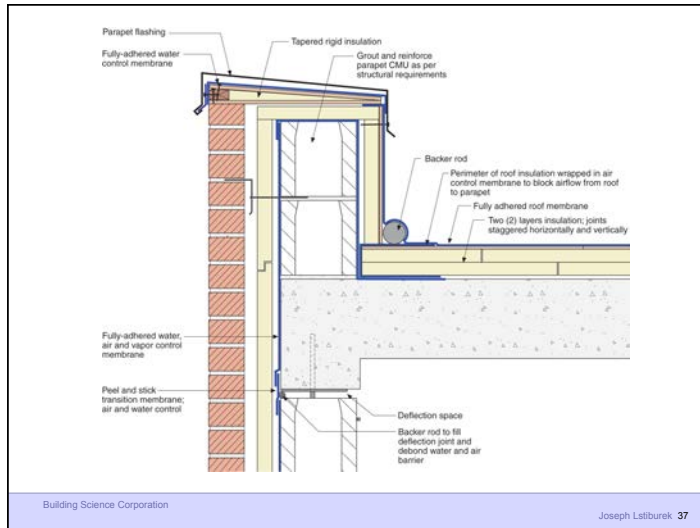


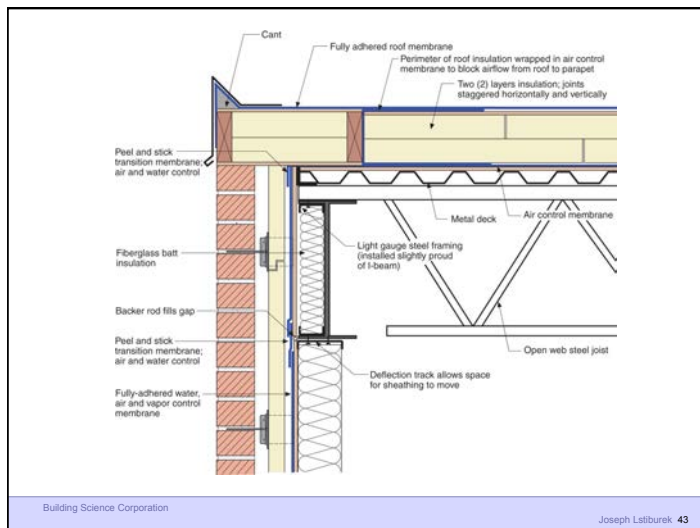
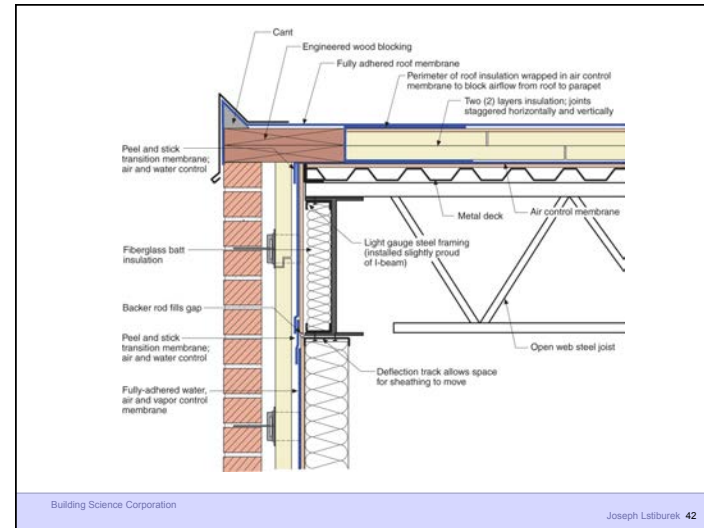
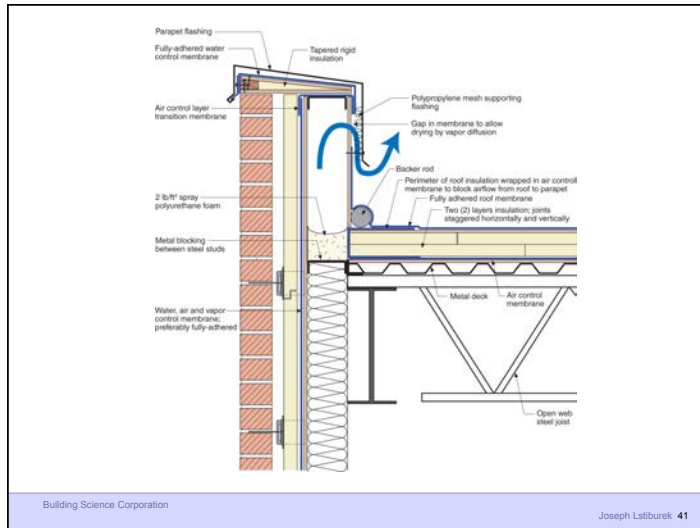












It's a Case of Black or White

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It's a Case of Black or White  
Arrhenius

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It's a Case of Black or White  
Arrhenius  
Every 10 degrees C – double the “badness”

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