SCALING NET ZERO

Presented by:

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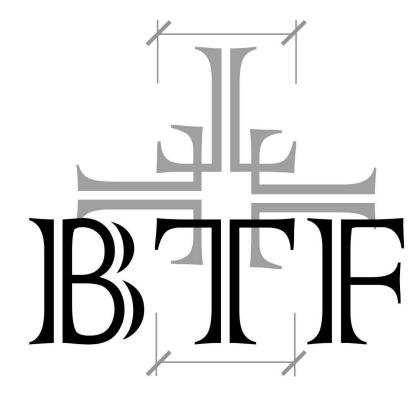
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April, 27th 2022

BTF Residential DesignsProud member of the EEN





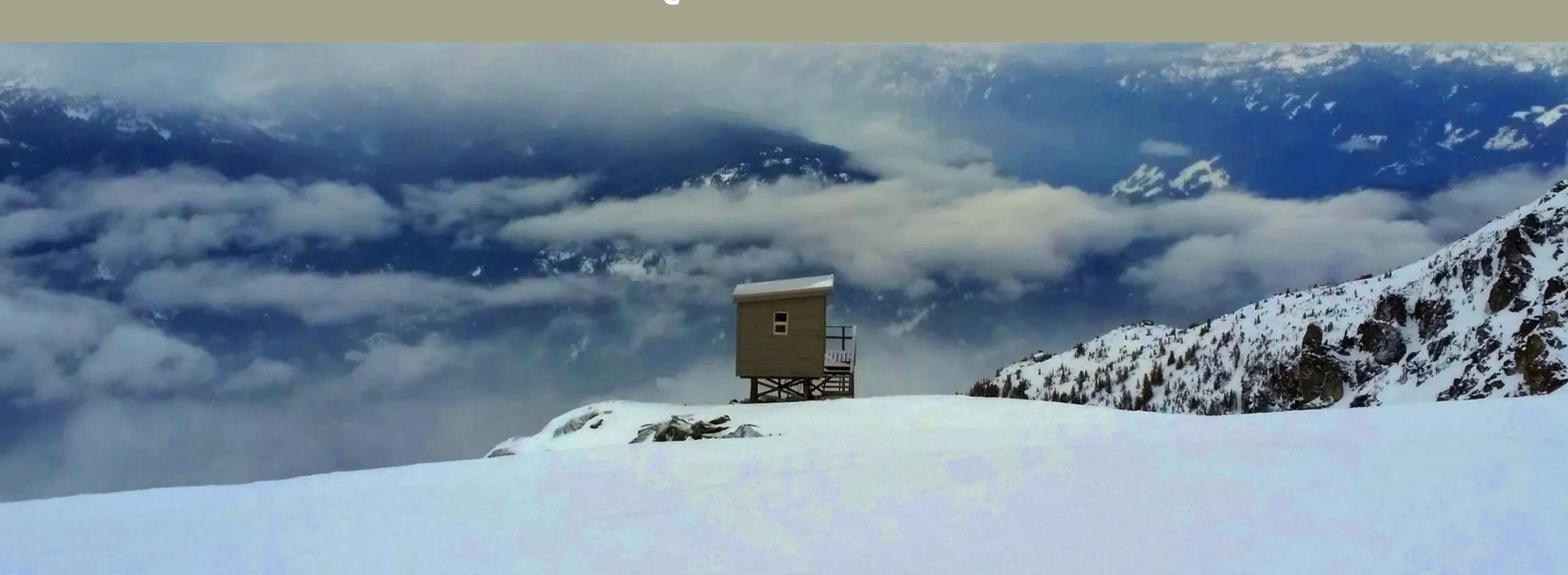


BTF RESIDENTIAL DESIGNS

PART1 PROBLEM



NEW DOES NOT EQUAL ENERGY EFFICIENT



PART 2 SOLUTION

Net Zero does not need to be expensive or complicated!

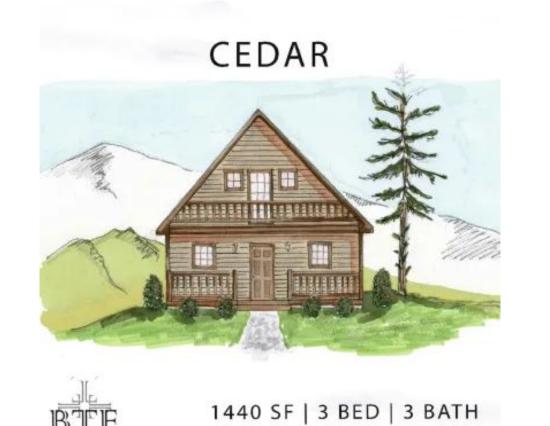
Reducing the need for expensive site specific design

Net Zero made easy for builders who are new to green building











INTEGRATED DESIGN



SPACE Conscious

ENERGY Conscious

RESOURCE Conscious



01 SPACE

Simplicity

North vs South

8760 Energy Analysis

Geographic Location

Openings

Envelope

Shape & Size

Orientation

Energy Modeling

Size

Location

Materials

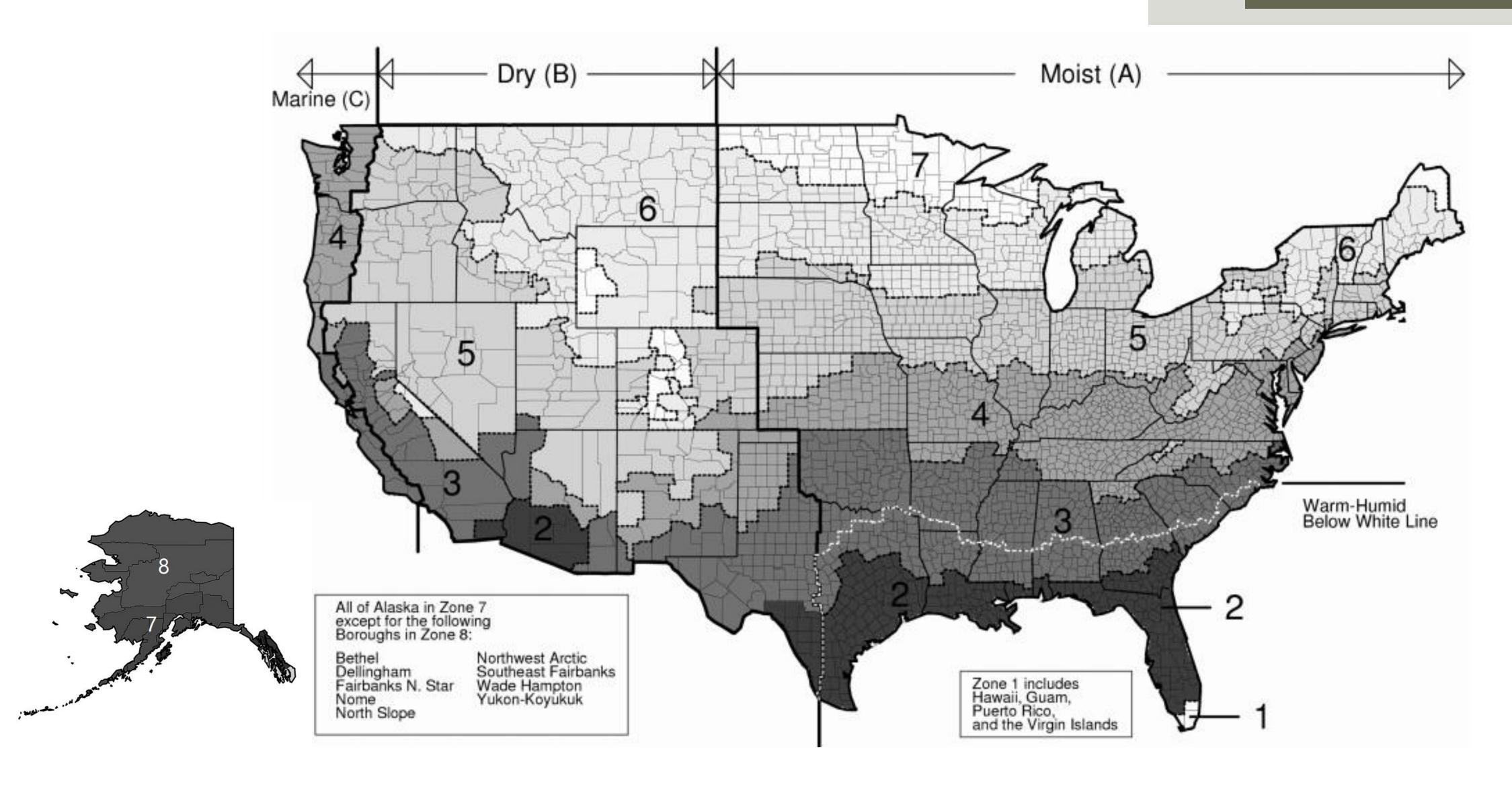
R-Values

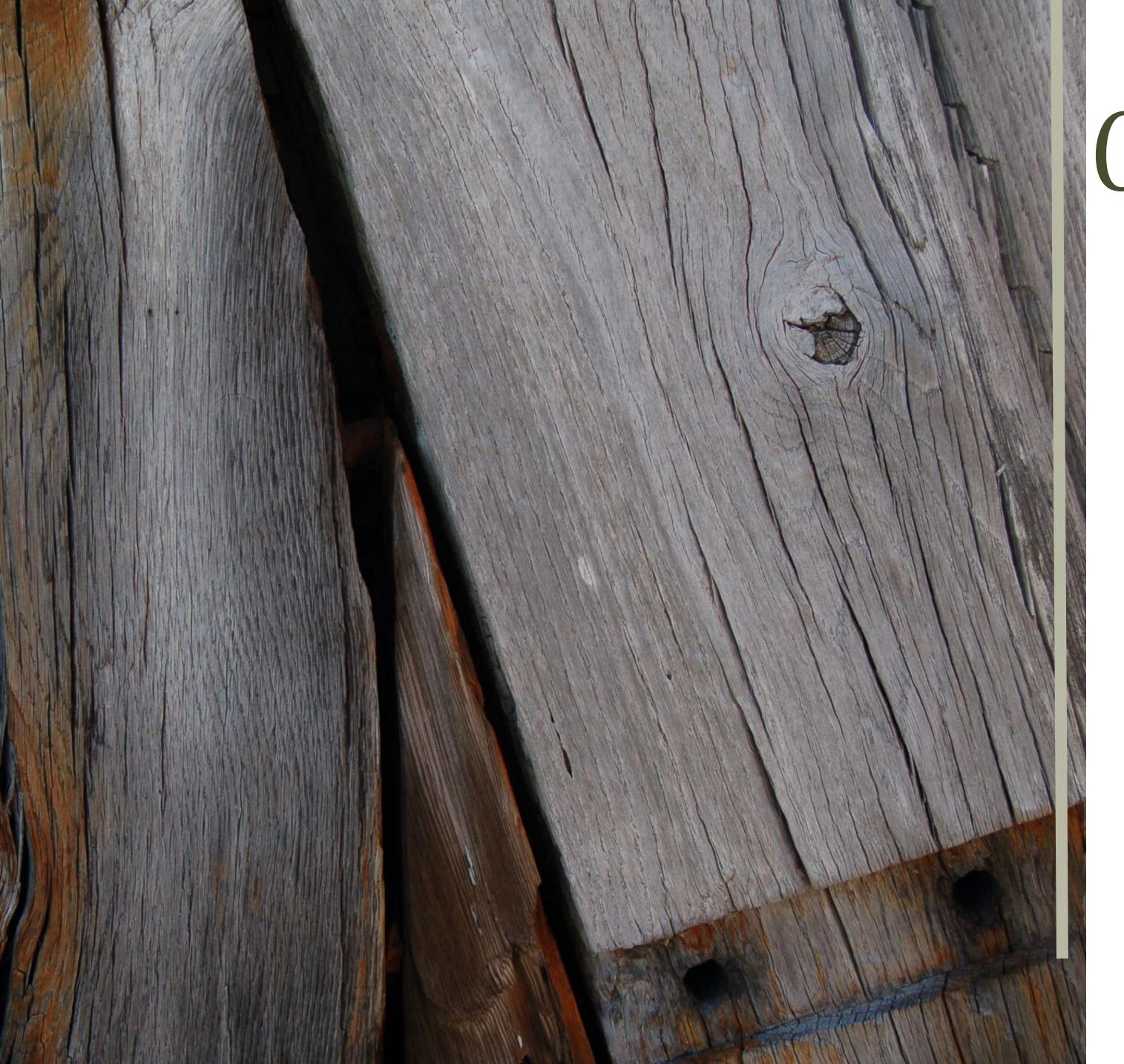
U-Values

Glazing

02 ENERGY

Climate Zones





03 RESOURCE

Save time, money & resources in construction

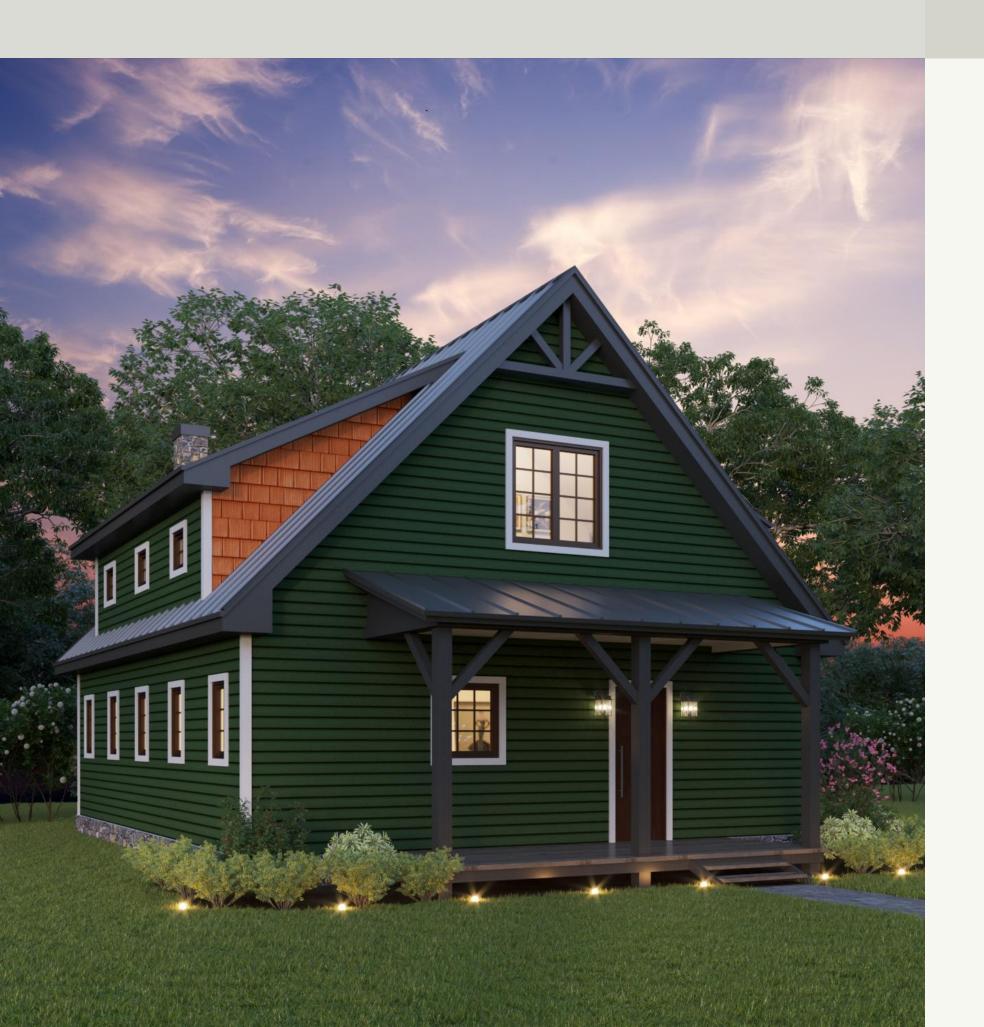
Historical exterior, modern interior

Square, rectangular, symmetrical

Simple & Beautiful



ENVELOPE HVAC



ABOVE GRADE WALLS: R-34

BELOW GRADE WALLS: R-35

ROOFS: R-49

SLAB: R-15

WINDOWS: U-0.3

Air to water heat pump

Radiant floor heat

Back-up electric heat

Optional pellet stove back-up

Kitchen hoods – vented to outdoors

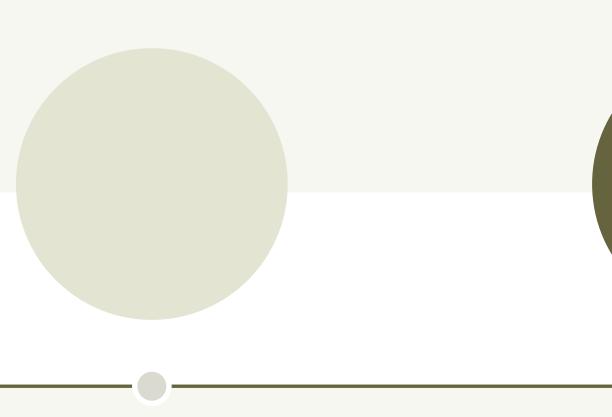
Bathroom EFs – vented to outdoors

24/7 Energy recovery ventilation units

Solar PV arrays

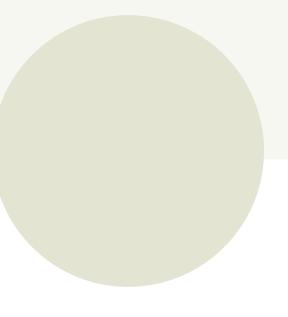
AC – single well-placed mini split recommended

Thank you for joining in!







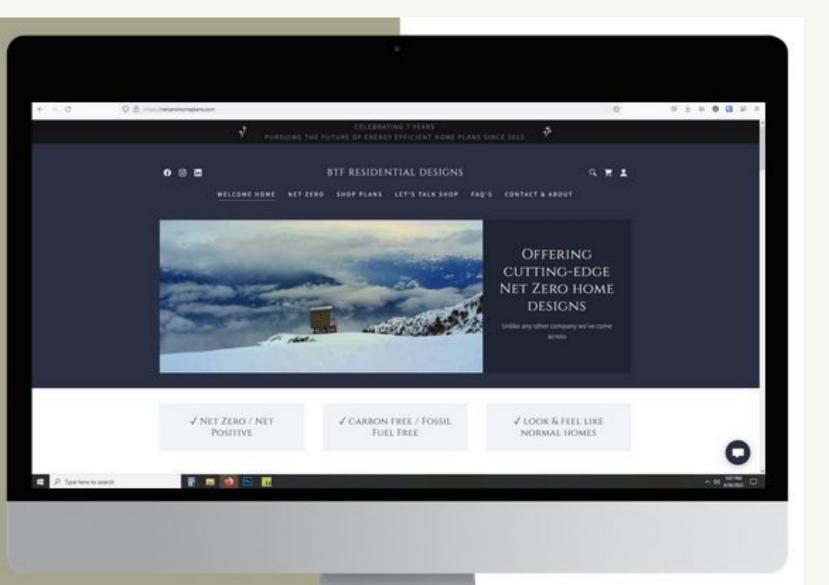


Ideas

Scaling Net Zero

Construction

Results



STAY IN TOUCH!

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