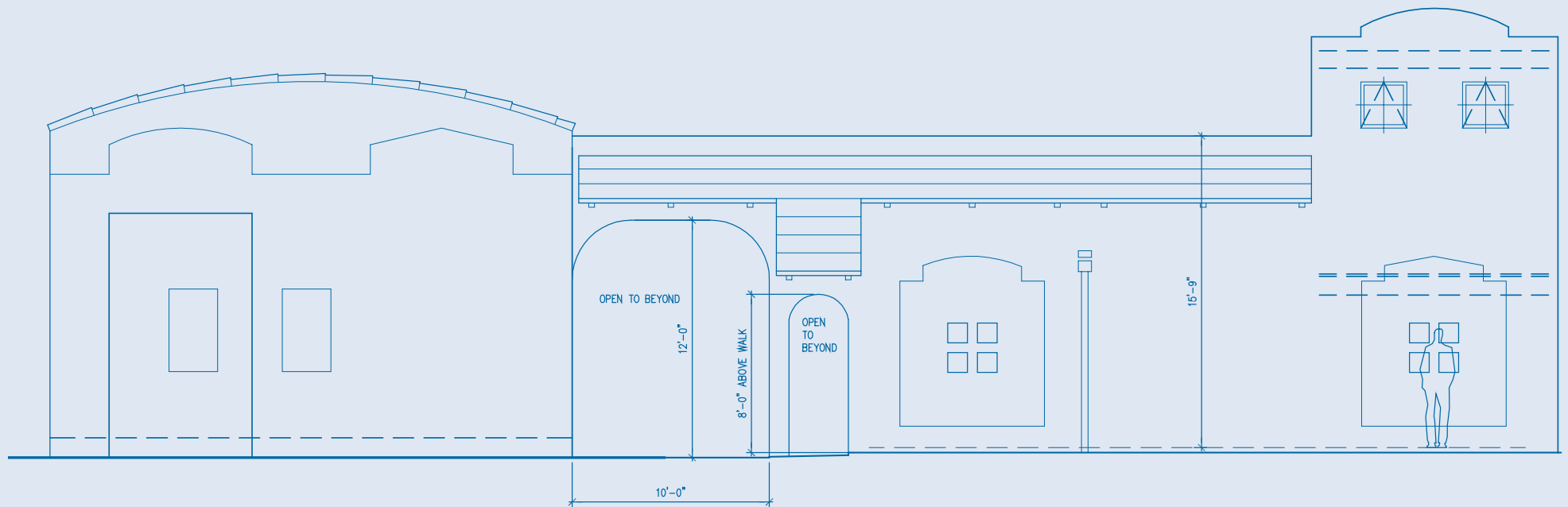


La Casa^{ZERO}

A True Carbon Neutral Building



EXTERIOR ELEVATION: NORTH

For more info visit: www.homefrontbuild.com

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La Casa ^{ZERO}

A True Carbon Neutral Building

In the United States more than 40% of carbon emissions are the result of the construction and operation of buildings. Although much focus is paid on reducing the energy consumption involved in the operation of buildings, more attention needs to be paid to reducing the carbon cost of actual construction.

On average it takes 20 years of a typical structure's 100 year lifespan to pay off the carbon debt it took to construct it. Add to that the fact that if an existing building was demolished to make room for a new energy efficient structure the carbon debt of that new building would take an additional 35 to 50 years to pay off.

While this seems to prove that the greenest building is the one that already exists, new construction can never be eliminated. However by using recycled building materials the carbon cost of new construction can be significantly reduced. This is because the use of previously manufactured

products produces no new carbon, and, they are in essence carbon neutral building materials.

Current LEED platinum standards require that only 5% of materials in a new building project be recycled. La Casa Zero will be built using up to 95% locally available reclaimed building materials in order to prove the viability of a strategy of increased use of recycled building products.

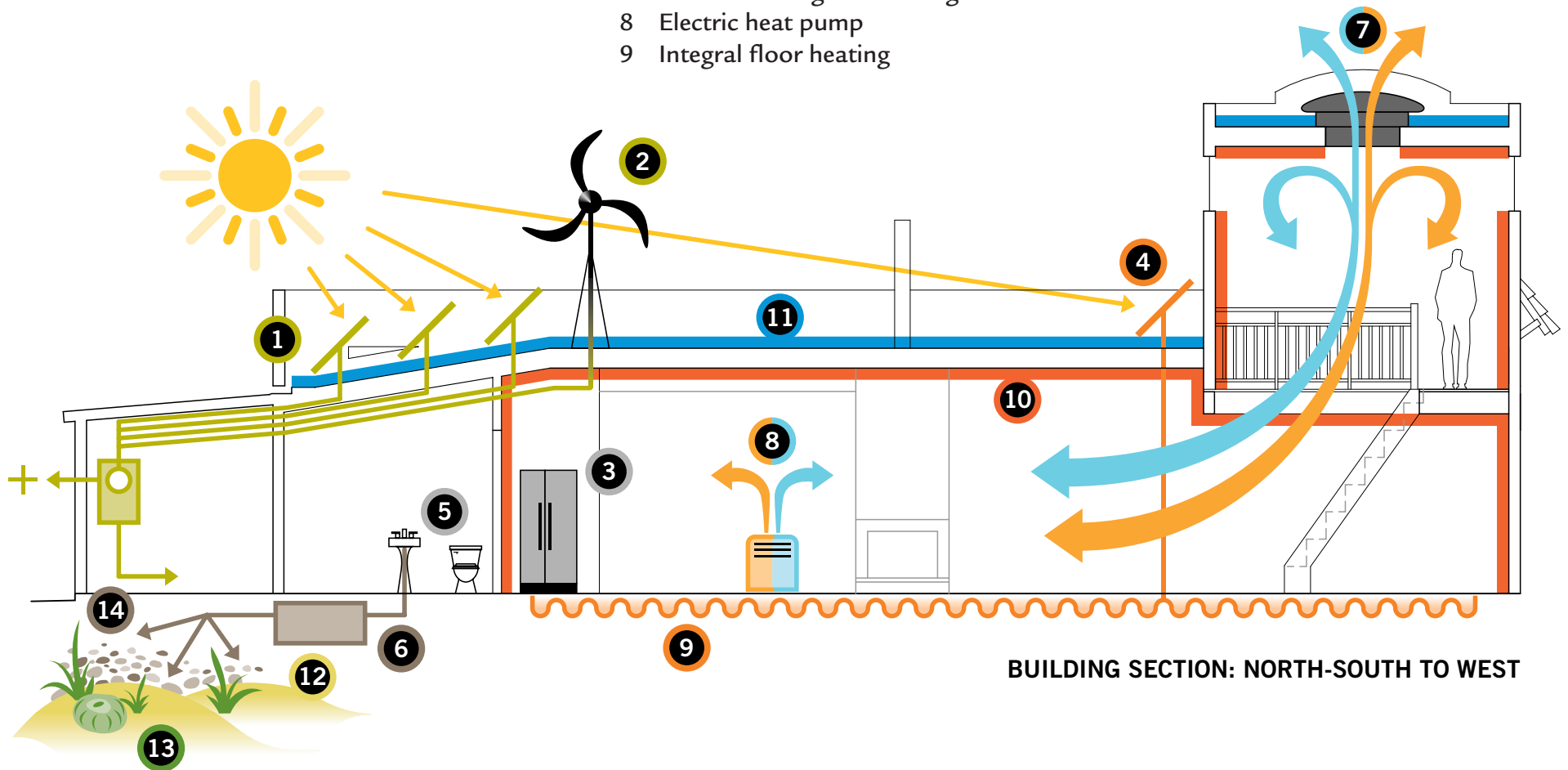
Supplementing this lowered carbon cost of construction La Casa Zero will be a net generator of energy. This all electric building will be operated using photovoltaic arrays, energy saving glass, green roofs and passive heating and cooling to produce more energy than it uses.

By reducing the carbon cost of construction and the carbon cost of operation, La Casa Zero can reduce its true overall carbon profile to zero, almost immediately, not decades from now.

La Casa ^{ZERO}

Building Systems:

- 1 Photovoltaic cells (surplus to grid)
- 2 Wind turbine
- 3 Energy efficient appliances
- 4 Solar hot water
- 5 Low flow fixtures
- 6 Gray water systems
- 7 Passive heating and cooling
- 8 Electric heat pump
- 9 Integral floor heating
- 10 R-19 insulation in walls, R-30 in ceiling
- 11 Title 24 compliant reflective roof coatings
- 12 Landscaping / hardscaping
- 13 Xeriscaping with California natives
- 14 Permeable hardscaping



BUILDING SECTION: NORTH-SOUTH TO WEST

La Casa **ZERO**

Building Products:

Structural / Framing

Fly ash concrete
Urbanite aggregate
Glu-lam structural beams
Reclaimed framing lumber



Finishes

Reclaimed flooring
Reclaimed drywall
Fly ash stucco
Reclaimed tile



Fixtures

Reclaimed toilets/tubs/sinks



Millwork

Reclaimed moldings
Reclaimed cabinetry



Roofing

Recycled Spanish 2-piece roofing tiles



“Green” technology is costly and beyond the means of most people. Through the use of lower priced recycled building products and passive heating and cooling strategies we can make being green more accessible.

By taking old buildings and recycling them into new buildings we are reducing the carbon footprint of the building industry, which currently consumes 40% of all energy, as well as creating a whole new set of inner city jobs, reprocessing of reclaimed building products.

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