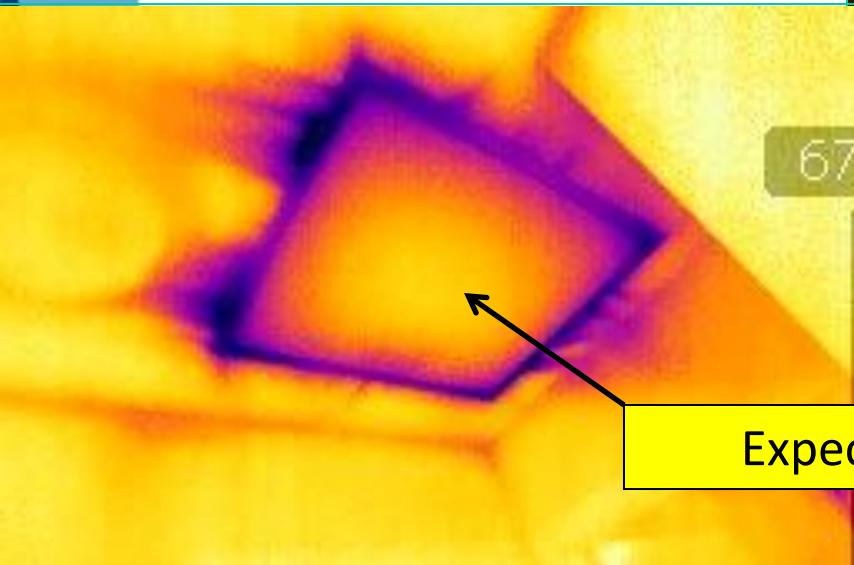


Unexpected

Air Barrier



Expected

SAL 7 History							
Unit /Type	EA3.2 (2pts)	EA3.3 (3pts)	Rin gType	ACH at 50 PA	Airflow (CFM)	LEED for HOMES Pts	
13/O2	1819	1083	A	3.6	1560	2	Initial Reading before insulation.
13/O2	910	541	B	2.77	600	2	2nd Reading after drywall..
13/O2	910	541	B	2.31	500	3	3rd Reading: After paint
13/O2	910	541	B	2.12	460	3	4 th Reading: After all trades had been through and before Air Barrier crew

For Record...achieved airflow of 360 (CFM) 1.66 ACH at 50PA



Air Barrier & Technology

First Benefit of an effective air barrier is long term durability. Air transports water.

Second Benefit of an effective air barrier is energy savings.

Using a Blower Door and Thermal Camera, Walsh Construction Company (WCC) trained crews assessed building performance, located and addressed issues before the walls were insulated and sealed. The thermal images & blower door kit you can see in the first building constructed in SAL 7. The thermal images show air infiltration at expected locations such as the attic access panel. This will get a gasket. But air can infiltrate in other unexpected locations. Using the Blower Door Kit and thermal camera, WCC can find and plug these gaps in the air barrier.

In this first building, achieved 1.66 air changes per hour at 50 Pascals. WCC applied this technique to all of the homes in SAL7 and every home to date has achieved 2.5 air changes per hour at 50 Pascals.

What does this mean for the SAL 7 resident?

On a average day in Tacoma, the air changes in the average home about 36 times a day. In a SAL 7 the air changes maybe 13 times in a day. Which home would you like to pay the utility bill on?



Waste Management



Waste Management and Recycling

The favorite dumpster on a jobsite is the 'Commingle Dumpster.' More than half of all material that goes into a commingle dumpster becomes either Alternate Daily Cover, which goes into a landfill, or becomes Hog Fuel and is burned for energy. Only half of the material is actually recycled.

Pre-cut framing packages (as pictured) dramatically reduced the amount of wood waste on SAL7 project.

SAL 7 saw the creation of the 'Clean Wood' Bin & the 'Blue Bin.'

The Clean Wood bin accepts all wood, except pressure treated. The clean wood is then hauled away and recycled into pulp for paper & cardboard. On most construction site...the wood goes to commingle.

The Blue Bin accepts all material that people normally recycle in their blue recycling bins at home, hence 'Blue Bin.' This Blue Bin is hauled to a recycler, who source separates the material which is then sent directly to other recyclers.

End result, 95% of our material on this project has been totally recycled. More impressively, in nearly 11 months we have not filled our garbage dumpster once.



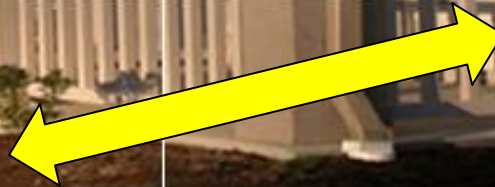
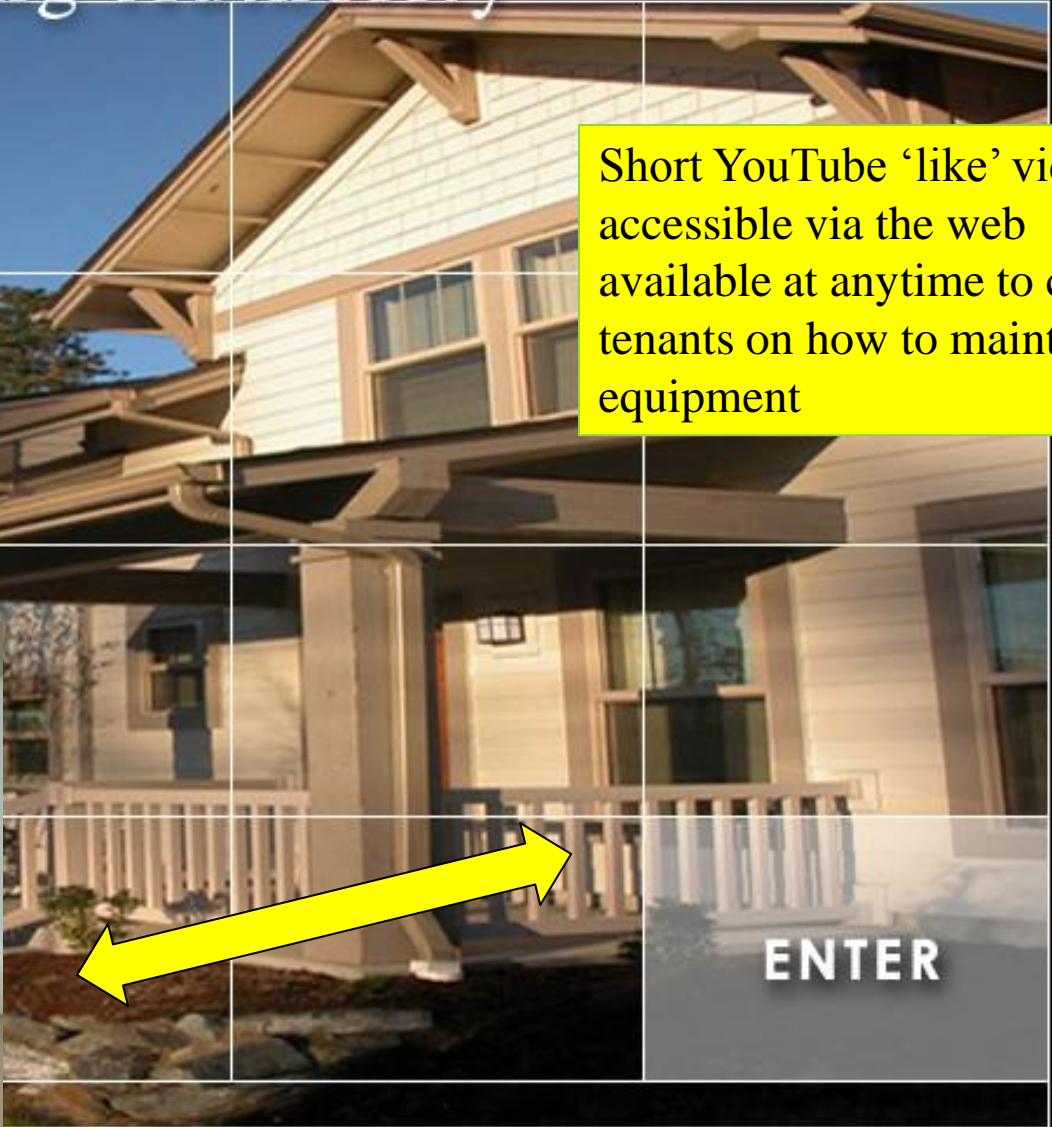
Tacoma Housing Authority

Tacoma Housing Authority



Good Morning!
Welcome to
Tacoma Housing Authority!

Short YouTube 'like' videos
accessible via the web
available at anytime to coach
tenants on how to maintain
equipment



ENTER

Education & Awareness

Tacoma Housing Authority provides a 1-hour walk through with all tenants to explain the homes, features, products and resources of the surrounding area.

In each home there is a Occupant's Manual, which is also on-line at THA's website.

Also, embedded in THA's website are short 'YouTube' like videos that provide short demonstrations on how to operate and maintain equipment.

SAL 7 units also have Tacoma Power's Gateway smart meter. This meter allows tenants to see their actual energy consumption by minute, hour, day, week or month. This allows tenants to better understand how they are spending their money on operating there home. Plus, it enables tenants to adopt more energy efficient practices.



Research

Salishan 7 is a Department of Energy Building America Project. Washington State University Extension Energy Program (WSU) is conducting the research. Salishan as a redevelopment is the perfect case study: 7 phases, 90 units each of the same building types.

WSU has conducted energy modeling on the worst case building in SAL 7, which demonstrated at least 30% energy savings over a comparable home. This translates into 27 homes removed from Tacoma Power's electrical grid. Through education and awareness, energy savings could reach 40-50%.

Over the next 1 to 4 years, WSU will be monitoring the energy and water consumption of the homes and will be providing valuable feedback to tenants, THA, and affordable housing in general.

In the very last building of SAL 7, THA installed a liquid Tyvek Air Barrier, 1" of exterior insulation, and Panasonic, Energy Recovery Ventilators. In this duplex which is still under construction, THA is aiming for a Passive House standard in air tightness of .6ach at 50PA. Testing the air barrier prior to sealing the walls has this duplex currently at 1.25ach at 50PA.



SAL 7 HIGHLIGHTS –

- **Certified LEED for HOMES Platinum**
- **Winner Home Depot Sustainable Communities Grant 2010**
- **1st HOPE VI project in country to achieve LEED for HOMES Platinum**
- **Largest project in country to achieve LEED for HOMES Platinum to date (91 homes on 22 acres)**
- **Certified Built Green 3Star currently pursuing 5Star**
- **NW Energy Star Certified, DOE Building America Project**
- **For a modest 6-7% increase in overall budget, SAL 7 provides homes that are at least 30% more efficient.**
- **Energy savings translates into the removal of 27 homes from Tacoma Power's electrical grid**
- **Every home has performed a 2.5ach at 50PA or less**
- **Selected by Northwest EcoBuilding Guild as one of the Top 10 projects for 2010 for the annual 10x10x10 Green Building Slam at Seattle Public Library**

