Opinions expressed in the Beehive Newsletter are not necessarily those of the Beehive Chapter ICC.

This newsletter is a monthly publication of the Beehive Chapter of the International Code Council (ICC).

Articles or advertisements appearing herein may be submitted by anyone interested in expressing a viewpoint to the Beehive Chapter membership.

Articles may be submitted to:
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MESSAGE FROM THE BOARD

This year’s barbecue will be held at Lindon City Park on August 19th at 6:30PM. See Page 8 for more information.

AUGUST PROGRAM

Chapter Barbecue
August 19, 2015
Time: 6:30P.M.
Lindon City Park
200 N. State Street
Lindon, UT 84042

September Meeting:
Tooele City
Orem City Council Chambers
September 16, 2015
Time: 12:00P.M.

Gary Hoglund
Past President

Summer Time Fun!

What kind of lights did Noah use on the Ark? I’d bet there was a shortage of inspectors and subcontractors back then also. I’m sure he was at a loss to build it as an owner builder but with a shortage of qualified contractors he had no choice.

Apparently it turned out okay as he was able to survive the disaster and move forward. It seems to me that many projects today have the same kind of situation. There is the owner who wants the work done in a quality manner and for the best price. Then there are people who are willing to help but really not too qualified or experienced, and some who have never done a project quite like this one but are wanting to do the work anyway.

So, as building officials and inspectors, you have probably noticed that things have changed and evolved into a process that can be complicated and sometimes difficult for the less than qualified to understand. The constant comment we hear is why do I need engineering, or a soils report, or can you tell me what I need to do or how would you want it done? Or, what do you mean my plans aren’t complete? …

CONTINUED ON NEXT PAGE
...I can build from these. What’s a cubit anyway?

So once the project has cleared concept review, plan review, engineering review, planning commission review, city council review, neighbor review, permit review, and finally review of review, then becomes the problem of finding qualified labor and supervision.

As we heard a couple of months ago, the industry is aging. Not only is there a large group of inspectors who plan to retire in the next 10 years, there is a large group of contractors and subcontractors who are in the same frame of mind. They have ridden the wave of busy, nothing, busy, nothing, busy, nothing for many years to the point that now it’s busy, they are thinking, I’ll ride this wave one more time and then get out while I can. But then what? Who is going to take their place?

The market has taken the turn that puts the “little guy” in a difficult situation. It seems the larger companies are the ones who are able to have the working capital to make it all work. This tends to weed out the smaller contractor who simply can’t compete with the pricing and production methods.

So what happens now and how can we help? There is room and a need for the smaller qualified builder. They fill a necessary part of the market. I personally feel that part of our job, after we have done our “code compliance”, is to teach, train, and encourage the new or young contractor in the “business of contracting”. Taking time to help them learn what is expected, how the process works, and the need to take pride in what they do. I believe we can help them to understand that the purpose of inspections is not to make a punch list or to design their projects, but to inspect for code compliance, then to teach them the how and why and to help them comply with proper and accepted building techniques.

We are on the same team, trying to accomplish a compliant finished product. We all had to learn somewhere, and hopefully we are still learning, how it all fits together. There is a new generation of builders that are in a place where many of us have been. (NO. I’m not admitting I’m old!) I realize many of them have been in school, have an understanding of the knowledge part of the business, but may need some support and time to apply what they have learned.

Hopefully we can encourage, support, and have patience as the industry builds back to having more qualified and experienced contractors doing the work. We can share what we know, take time to teach, and help the new generation of builders become what we once thought we were. Oh, by the way, Noah used flood lights on the ark.

Happy inspecting!

Gary Hoglund
Past President
LOW SLOPE SHINGLE ROOFING

By: Jim Yeoman
Orem City - Commercial Plans Examiner

Prior to becoming a Building Inspector/Plans Examiner 30 years ago, I was a Union Journeyman Hot tar and Shingle Roofer in Sacramento, California. I loved the freedom of the trade but after two lower back surgeries it was time to use my brains and not my bronze.

I have recently received a lot of phone calls asking about re-roofing low slope roofs with asphalt shingles. The I-Codes don’t give us near the information about this as the old Uniform Codes did, but it is still fairly clear when you also look over the manufacture specifications for the products.

The performance of all roof coverings is based in part on the slope of the roof surface. As the slope of the roof decreases, water drainage is slowed, and the potential for water intrusion increases because of the greater potential of water back-up under the roofing. Asphalt-shingles, because of their configuration and installation methods, are restricted to use on roofs having a minimum slope of 2:12. Where the slope is no steeper than 4:12, the underlayment must be doubled to provide a greater barrier to leakage.

R905.2.2 Slope. Asphalt shingles shall be used only on roof slopes of two units vertical in 12 units horizontal (2:12) or greater. For roof slopes from two units vertical in 12 units horizontal (2:12) up to four units vertical in 12 units horizontal (4:12), double underlayment application is required in accordance with Section R905.2.7.

R905.2.5 Fasteners. Fasteners for asphalt shingles shall be galvanized steel, stainless steel, aluminum or copper roofing nails, minimum 12 gage shank with a minimum 3/8-inch-diameter head, ASTM F 1667, of a length to penetrate through the roofing materials and a minimum of 3/4 inch into the roof sheathing. Where the roof sheathing is less than 3/4 inch thick, the fasteners shall penetrate through the sheathing. Fasteners shall comply with ASTM F 1667.

R905.2.6 Attachment. Asphalt shingles shall have the minimum number of fasteners required by the manufacturer, but not less than four fasteners per strip shingle or two fasteners per individual shingle tab.

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**LOW SLOPE SHINGLE ROOFING** (Continued)

**R905.2.7.1 Ice Barrier.** In areas where there has been a history of ice forming along the eaves causing a backup of water as designated in Table R301.2(1), an ice barrier that consists of a least two layers of underlayment cemented together or of a self-adhering polymer modified bitumen sheet, shall be used in lieu of normal underlayment and extend from the lowest edges of all roof surfaces to a point at least 24 inches inside the exterior wall line of the building.

Where ice dams may be formed along the eave because snow continually freezes and thaws or frozen slush backs up in gutters, the underlayment application in the area of the eaves must be modified to prevent ice dams from forcing water under the roofing, which could damage ceilings, walls and insulation. Two layers of underlayment should be cemented together with asphalt cement from the lowest edge of the roof and continue up the roof to a point that is at least 24 inches inside the interior wall line of the building.

The environment within the envelope of the building provides adequate warmth to prevent ice dams from forming above the heated space; therefore, the two layers of cemented underlayment are permitted to terminate 24 inches inside the interior wall line of the building.

The installation of flashing at vertical roof penetrations such as chimneys, soil stacks and vent pipes must be in conformance to the instructions provided by the asphalt shingle manufacturer. This will cover what I believe is the biggest problem I see in roofing and re-roofing the missing counter flashing as shown below around chimneys and rake walls.

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**The Good Old Daze!** Yes, I still miss the smell of Hot Tar at times.

*By: Jim Yeoman*
Outdoor living areas have become an important consideration during design. Buyers are younger, living in modern spaces with little or no maintenance requirements so they have more time to enjoy living. These type of residences often have no space for entertaining friends or family so architects and designers are exploring cost effective ways to open up the home by offering outdoor living spaces like roof decks.

The IBC has no area that specifically addresses walkable roofing. This can put building officials in a tough spot as the code requires an approved roofing product. But when these creative designs come into play and the roof will be used for pedestrian traffic, furniture, hot tubs and the like what should be done? This is the grey area.

Membrane roof coverings are designed, manufactured and tested to withstand direct “service” foot traffic. Slip resistance, abrasion resistance from sustained loads are not part of a roofing membrane standard’s criteria, but are essential to pedestrian traffic membranes.

Architects, Engineers, Contractors & Specifiers
Evaluation reports assist in determining if a new or novel product meets the intent of the International Building or Residential Codes and is suitable for its intended use. Due diligence is provided by ICC-ES.

Authorities Having Jurisdiction (AHJ)
It is not mandatory that the AHJ use evaluation reports, but rather evaluation reports are there to facilitate a product’s acceptance by an AHJ. ICC-ES evaluation reports remove the burden of determining a product’s proof of Code compliance for its intended use.

ICC-ES Evaluation Report requirements for a membrane roof covering suitable for pedestrian traffic:
The International Code Council (ICC) developed and administers the International Building Code (IBC). ICC Evaluation Services (ICC-ES), a subsidiary of ICC, is an approved agency which provides evaluation reports that can be used to determine if a unique product is suitable for its intended use.

ICC-ES creates acceptance criteria (AC) for products with a similar usage. In the case of Duradek Ultra Roof and Walking Deck membrane it is AC 39 for Walking Decks and AC 75 for Membrane Roof Covering Systems. Acceptance Criteria (AC) are scrutinized and updated to meet the ever-evolving International Codes.

By: Matt McClure
### AUGUST 2015

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CHAPTER BAREBECUE - August 19, 2015, Lindon City Park

ANNUAL BARBECUE

Where: Lindon City Park
200 N. State Street, Lindon, UT

When: Wednesday, August 19th
Time: 6:30pm – 8:30pm

All Beehive Chapter Members and a Guest are invited. We will enjoy great barbecue catered by the Smoking Apple, rub shoulders and enjoy each others company, play games (including Corn Hole with the chance of dethroning Gary Hoglund!), etc.

We hope to see you all there!