



## ***The Quantum Quote***

Issue 9, June (but really July) 2012

Happy Independence Day!

I could blame it on the winter-like weather, but the truth is that July snuck up on me! In this issue, you'll find information on Indoor Air Quality, common safety hazards, and Part 5 of Building: Start to Finish.

Until August!

Josh  
(360) 293-0656

---

## **Charity Choice & Last Month's Winner**

Our winner for last issue's Charity Choice is the YMCA Oasis Teen Shelter in Mount Vernon. It happens to be close to my heart, as my Leadership Skagit team just finished a service project there (see picture below). The Shelter serves 13-17 year olds, accommodating up to 7 at a time for 21 days each, and is open 365 days per year. Teens come from all over Skagit County for a place to stay, a warm meal and counseling support. You can learn more about the shelter [here](#).

Unfortunately the responses to Charity Choice have been declining over the last few issues of the Quantum Quote. As this column was intended to be an dialogue with our readers to select charities, after this issue it will be discontinued. Thank you to each of you who brought awareness to the causes you hold near and dear to your hearts.



Our Leadership Skagit project at Oasis was a covered 12'x20' patio. Pictured here is our ribbon cutting.

---

## Safety Corner

### **Seven Common Injuries**

In 2005, Washington Labor and Industries looked at 1998-2002 for the most common injuries. The following 7 types of injuries made up over 92% of all reported and totaled over \$3.6 BILLION in costs. As you look these over, picture how these might apply to your work and home lives, and with a little care you can avoid joining these statistics. Remember, proper safety is not an accident.

1. **Caught In/Under/Between-** It's easy to put yourself in the wrong spot, trying to fix jammed machinery or malfunctioning equipment without shutting it off. It's also an easy way to injure yourself. *Always* shut off machinery, make it safe, and disable controls.
2. **Falls from Elevation-** One of the most common deadly accidents, falls can happen from roofs, ladders, scaffolding, second story windows, or even from trailers and trucks. A common misconception is that you have to be high up to injure yourself. In truth, falling from a low height and landing on something or in the wrong position is just as likely to harm you. After all, most of us take precautions when we're high up.
3. **Fall At Same Level-** Believe it or not, slips, trips and just plain falls on flat surfaces make the top 7. Wear proper footwear for your task and don't overload yourself.
4. **Struck By/Against-** This includes pedestrians hit by vehicles or freight as well as incidents involving flying debris. Active situational awareness and proper personal protective equipment are good ways to avoid these injuries.
5. **Motor Vehicle Accidents-** Active situational awareness, following traffic laws, and using common sense in poor weather are good ways to avoid these accidents.
6. **Musculoskeletal Disorders of Feet, Ankles and Knees-** Probably the hardest to pin down, these injuries are often linked to other parts of the body and can involve repetitive motions, heavy lifting or improper posture.
7. **Musculoskeletal Disorders of Neck, Back and Arms-** Posture is king for these. Including sitting, lifting, repetitive motion and standing, posture keeps away injuries in tasks ranging from picking up a garden hose to demolition of a concrete patio.

---

## Sustainable and Efficient

### **Indoor Air Quality**

One oft overlooked factor in sustainable construction is indoor air quality. Green building shouldn't just be good for the environment; they should also favor the people who live, work, and play within. If you or your family are concerned about allergies, asthma and other respiratory illnesses, or just want to make sure you're breathing fresh air, it's something you should think about too.

It's important to know that the buildings that are built today are drastically different than those of yesteryear when it comes to air. Those built in the past were well ventilated...er, drafty. While that was bad for energy efficiency, it meant that buildings had more fresh air and if water got in, there was often enough airflow to dry it out before damage could occur. New buildings are significantly more airtight, which means that we now need to worry about fresh air and moisture control. Many new forced-air furnaces aid us in this, supply fresh air and circulating it. Add-ons like HEPA filters and ultraviolet lights can also remove contaminants from the air. Other ways to bolster fresh air include a comprehensive network of supply and return air grilles, ports specifically designed for adding fresh air, and simply remembering to open the windows from time to time.

There are also many ways to reduce the number of contaminants that come into a building. Removing shoes when you enter a home or providing a walk-off mat at a business is one easy way. If you think about what shoes might walk through on a given day (weed killer, slug slime, oil, dog droppings, fertilizer, old gum...), you might think twice about the 5 second rule in a "shoes on" home. If you're working on a home improvement project, look for no- or low-VOC products. VOCs are volatile organic compounds, like formaldehyde, which are often present in adhesives, paints, floor coverings, new furniture, and some insulation and building materials. Typically these products slowly release the VOCs into the air through a process called "off-gassing," affecting people over a long period of time. Finally, even low-VOC carpet still traps in other contaminants; solid surface flooring such as hardwoods and polished concrete in place of carpet can raise the quality of indoor air.

It's hard to cover all of the details in a reasonable length article. If you have questions about indoor air quality or would like to hear about more ways to improve it, feel free to email me.

---

## **Building, Start to Finish: Part 5**

If you've been following along with the Building: Start to Finish series, you'll know that the house we've been "building" was previously left off with siding and roofing. From a street view, the house just needs a little touchup. The inside is a different matter. Once you step through the front door, you'll see unfinished subfloors, open stud walls, exposed wires and pipe, and more! Our flow chart grouped the next steps under the heading "Interior," which includes insulation, drywall, painting, flooring, trim, trim out, and casework. We'll cover half in this installment and half in the next.

Be forewarned! If you've been watching your budget, you may be inclined to splurge at this point. After all, the house is up and you've probably spent less than half your budget. While the structural component is the largest physically, the interior finishes can be up to fifty to seventy percent monetarily.

### **Insulation**

Insulation serves two purposes in a home. In exterior walls, ceilings, and floors it offers thermal protection to lower heating and cooling costs. In interior walls it aids in sound privacy (think bathrooms). Insulation is rated by R-Value, which reflects its effectiveness, with the higher the value, the better. The three most common types of insulation are blanket, loose-fill or blown-in, and sprayed foam. Blanket insulation is what most of us envision for insulation: rolls or batts of pink fiberglass tucked between studs. Blown-in insulation is made of loose fibers and commonly used for attics, and sometimes for walls. Sprayed foam is a product that is sprayed or injected into place between studs.

#### Tips for Savings

The best way to save money on insulation is to hire a reputable insulation company. They can often supply and install insulation for less than most homeowners can buy the materials for, due to their volume pricing. Insulation is always one of the best ways to invest in your home; a little extra money on insulation can reap huge savings in heating and cooling with a return on investment time of one to three years.

#### Tips for Success

Insulation is only effective if it fills all gaps, limiting air flow. Ensure that blanket insulation is cut to an exact fit and is not compressed. Typically the cost and effectiveness of each type, starting at the lowest, is blanket insulation, blown-in, sprayed foam.

### **Drywall**

Most buildings use drywall to cover interior walls. It's affordable, looks good, and is sound dampening and fire resistant. It is composed of naturally occurring gypsum

sandwiched between two sheets of paper and will be screwed to the wall with joints sealed, textured, and painted. Textures include orange peel (the common “speckled” look), smooth wall (a higher end finished), and knockdown, which produces a marbled look. Additional considerations are corner profiles (square or round) and window wraps (drywall on the inside of window casings).

#### Tips for Savings

Square corners and an orange peel texture are typically the most cost effective finishes. Sometimes a knockdown texture, which has a higher-end look, can be obtained for only a minor increase. Window wraps add costs, but can save on trim down the road.

#### Tips for Success

Speaking from personal experience, hire someone! While most home-owners can do a passable job, a drywall contractor will do it better in a fraction of the time.

### **Painting**

Most of us are well acquainted with paint. In residential applications, the process will typically include one coat of primer and two coats of paint. In addition to color, you’ll choose a finish sheen, which include (from least sheen up) matte, eggshell, satin, semi-gloss and gloss. Higher sheens are more moisture resistant and easier to clean.

#### Tips for Savings

This is one step that many homeowners choose to self perform. If doing so, select a good quality paint that covers well to save on extra coats and buy 5 gallon containers. Sometimes the drywall contractor will also provide your primer, so ensure you’re not paying for two.

#### Tips for Success

Consult with your painter or supplier on the best sheen to use by room. Buy samples of desired colors and paint sections of your walls to see how a color looks in setting.

### **Flooring**

The types of flooring available are nearly limitless, including carpet, finished concrete, tile, linoleum, marmoleum, vinyl, wood, laminate, and VCT. Each type comes in different sizes, styles and price ranges. The best way to narrow down your options is to visit a specialized flooring store with your plans and work with an experienced salesperson. Before you go in, consider your current floor. What do you like about it? What would you change?

#### Tips for Savings

There are a lot of great looking products for incredible prices. Laminate wood is a great example of one that can look great and still be easy on the wallet. Other budget friendly options are carpet and vinyl. Some products can be easy for you to install yourself including some laminates.

#### Tips for Success

Consider your usage. Cheap tile floors may crack if a heavy pot is dropped, some woods may scratch under traffic from kids or pets, and white carpet is nearly taboo for red wine drinkers. If you have allergies, remember that carpet can hold in allergens. Picking the appropriate flooring will insure that you’re pleased with it for years to come.

We’ll pick up next issue with trim, trim-out and casework. Our series is nearly complete!

---

[Quantum Construction, Inc.](#) is a family-owned general contractor based in Anacortes, WA. Quantum has been building high quality commercial, custom residential and industrial projects since 1984. For information on how we can give you the best building experience, please contact us by [email](#) or by phone at (360) 293-0656.



---

If you no longer wish to receive these emails, please reply to this message with "Unsubscribe" in the subject line or simply click on the following link: [Unsubscribe](#)

---

Quantum Construction, Inc.  
12761 Quantum Lane  
Anacortes, WA 98221  
US

[Read](#) the VerticalResponse marketing policy.

