Quality in Construction
If we can do it for hamburgers, can't we do it for buildings?

By Ryan Dalgleish

Most of us have, sometimes regrettably, have gone and indulged ourselves with a nice tasty burger. After a feeling guilt for not sticking to our new year's diet, we now enjoy our favorite burger from our favorite place. I tend to be loyal to certain burger chains and no matter where I am, I can usually find a place to go.

I have this inherent expectation that no matter where I go, that burger is going to taste the same. I expect nothing less and if it does not taste the same, I send it back and complain to the manager.

So, if we look at this, have you ever wondered how these burger chains provide a consistent taste, no matter where they are located (even in another country). There is a good chance, well a 100 % chance that it is because they have developed standards, have processes in place, have standard operating procedures, training for employees and identified competencies and then apply consistently, no matter where they are located.

If that is the case for a burger, have you ever wondered why we cannot take these same ideas or processes and apply it to how we build?

Can we apply the principles to our building process?

Of course! The manufacturing industry adopted quality assurance principles for years for how they develop and produce products. It is high time we become more focused on providing quality to our construction process for both design and construction.

What do we need to do? The first step is to define quality:

The planned and systematic activities implemented in a quality system, so that quality requirements for a product or service will be fulfilled.

Quality is not waiting for a defect or some last minute effort. It needs to be committed to upfront. If not, it is probably too late.

If we drill down further we find out that Quality is made up of 5 key ingredients:
- Define what quality is for your particular needs
- Define standards and specification to meet the quality standard
- Establish a process for preventative and corrective action
- Train for competency
- Commit to continuous improvement

Why is Quality important?

I have yet to hear a contractor say that they do not do quality work or a manufacturer say that do not provide a quality material. I have not heard an architect say they do bad design or a general contractor indicate that are horrible at project management.

Unfortunately, actions speak louder than words and if we have not defined what quality is, defined standards, processes and what competency people require to execute, we are not sure what we get until the building is done, or months or years later when a problem manifest's itself.

The Air Barrier Association of America Quality Assurance Program

Implementing quality is a function of risk assessment. Focus should be on the highest areas of risk to the performance and durability of the building.

As moisture is probably the number one risk to a building, the design and construction of your wall assembly becomes critical. For components buried within the wall systems, it becomes even more critical. At this point, it is more than just saving energy, it is about making the building last to its intended life.

The Air Barrier Association of America has taken the principles of ISO quality management systems and applied it to the construction process. Most of the work in the quality system comes way before a building is designed or constructed. If we take a look of our key ingredients for quality, the focus has been defining quality, creating standards, training for competency and commitment to improvements, with quality control to ensure system are operating properly.

The goal you could say is to ensure that you get the same quality air barrier installation, not matter where you are, what project you are working or what sub-trade you choose.
So, if you are currently designing a project or working to construct a building, think about that hamburger and how you can take simple steps and principles to make better buildings.