

# Use and Abuse of Construction Warranties

By Mark Brown, PE

Long-term holders of buildings such as universities and other campus institutions are particularly interested in construction warranties, because warranties hold out a promise of performance and reliability in the finished project. These Owners and their Architects make important design choices (such as window, glass or roof system selection), as well as construction phase decisions (such as how much effort to put into construction oversight) based in part on express written warranties in common use in the industry. In this article we discuss practical considerations on the use and abuse of construction warranties. We focus on warranties that relate to the “building envelope”, i.e., roofs, walls, windows, curtain walls and the like, because that is the focus of our consulting practice.

## Warranty Basics

First of all, we are talking only about “express” warranties, i.e., those that are specifically written into construction contracts and contract specifications. “Implied” warranties are a more complex legal subject of less direct concern to designers and owners.

Owners and Architects look to two basic types of express warranties to help safeguard the Owner’s interests:

1. General Contractor Warranty
2. Manufacturer’s Warranty

## Warranty from the General Contractor

Owner-Contractor documents issued by the American Institute for Architects (AIA) are the favored “front-end” contract documents for many projects. Under AIA document A201, General Conditions of the Contract for Construction, the General Contractor warrants several things to the Owner:

1. Materials and equipment are of good quality and new

2. Work will be free from defects (meets quality required or permitted)
3. Work will conform to the requirements of the contract documents (i.e., the work is per plans and specs)

If the Owner discovers that any of the above is not true, the General Conditions provide two remedies:

1. If nonconforming work is discovered **during construction**, the Owner can reject the nonconforming work and have the Contractor remove and replace it.
2. If nonconforming work is discovered **within one year of substantial completion**, the Owner can require the Contractor to return to the site and correct the nonconforming work.

What about discovery of nonconforming work after one year? Then the Owner resorts to his right to sue based on the laws of the jurisdiction. This is beyond the scope of the AIA General Conditions.



**Did you know that 100 years ago** – The AIA and National Association of Builders jointly prepared an Owner-Contractor standard form of agreement – one without any mention of a warranty or guarantee. Instead, the Contractor’s work was to be done “under the direction” of the Architect, who had the power and responsibility to condemn unsound, improper or non-conforming work.

## Manufacturer’s Warranty

Manufacturers of critical systems or components such as roofing, below-grade waterproofing, windows, curtain walls and insulating glass, to name a few, offer written warranties on the performance of their systems that bind them directly to the Owner. If the roof or curtain wall leaks, or the insulating glass fogs, during the warranty period, the manufacturer promises to remedy the situation by making repairs to stop leakage, or replacing the fogged insulating glass unit, on written notice of a warranty claim from the Owner.

Some warranties, for instance a 20 year warranty against roof or below grade waterproofing leakage, come at an additional price to the Owner. The manufacturer puts (or should put) the warranty money it collects in a warranty reserve that funds warranty claims.

### Good Things about Express Warranties

In the legal sense, the General Contractor's warranty places the responsibility for delivering work free from defects and in conformance with the contract documents squarely on the General Contractor's shoulders. The General Contractor cannot argue that the Owner and/or Architect were present during construction and knew or should have known about the defective or non-conforming work. (Notwithstanding the contractor's legal responsibility, we will argue from a practical standpoint for the maximum possible construction oversight from the Owner and Architect, even with the best warranty, but more on that later.)

The General Contractor's warranty is tied to the Performance Bond, if the Owner has required the Contractor to provide one. This means that if defective work is uncovered within the one-year correction period and the General Contractor is out of business or otherwise unable to perform, then the surety providing the Performance Bond has to pay for another contractor to correct the defective work.

### Manufacturer's warranties benefit Owners in several ways:

1. They bind the manufacturer and sometimes the subcontractor directly to the Owner. The Owner should notify the General Contractor of warranty claims and seek his involvement, but if the General Contractor is uncooperative or out-of-business, the Owner can still make the claim directly to the manufacturer.
2. They motivate the manufacturer to pay attention to each project. Of course, they should do that anyway, but a strong warranty adds more deterrent against poor design, lax quality assurance and unqualified subcontractors.
3. They help avoid arguments about who is responsible if something goes wrong. The

warranty should define what the Owner's responsibilities are for maintenance, what the warranty will and will not cover, who will do what and when in the event of a warranty claim.

### Bad Things about Express Warranties

Warranties have lots of fine print, i.e., lots of exclusions. Some of the more common exclusions, and their consequences to Owners, are summarized below.

- Even with a leakage warranty, **the Owner pays** for repairs to interior finishes damaged by leakage. These warranties don't cover such "consequential" damage.
- Even with a below grade waterproofing warranty, **the Owner pays** for digging up and restoring the plaza to provide access to the membrane for leak repairs by the manufacturer/subcontractor. These overburden removal costs can greatly exceed the cost of leak repairs.
- Even with a window (or insulating glass, roofing, or other) warranty, **the Owner pays** for repairs of design or workmanship defects in the surrounding construction. When leakage shows up at new windows, it is usually not because the windows themselves leak but because the window perimeter sealant is faulty or because leakage from the surrounding wall is dripping onto the windows. When insulating glass units start to fog, the manufacturer may be able to blame faulty drainage provisions in the window or curtain wall. Again, **the Owner pays**.



This photo shows a curtainwall sill corner in a building under construction, in which we can see sill fastener clips that penetrate the sill flashing, backer rod braided like a rope, and flashing corner

not soldered. If this condition were not corrected during construction, there would be at least three subcontractors for the curtainwall manufacturer to blame for interfering with their system. And no warranty would cover the cost of damages to the interior finishes as a result of the leak.

- Under warranties that cover only the replacement material, not the labor or access (and there are many such warranties), **the Owner pays for** labor and staging to remove the defective material and install the replacement material.
- Once construction is over, the biggest costs of repairing occupied buildings are the staging, cutting and patching, and interruption to the occupants. Even labor **and** material warranties typically exclude these costs.
- Warranties are often pro-rated. If a product fails in year 9 of a 10-year warranty, **the Owner pays** nine-tenths of the cost of the material, or material and labor if labor is excluded.

Other common warranty pitfalls that Owners and Architects fall into include the following:

- The warranty period is much shorter than the expected life of the building component. The 5 or 10-year warranty on the fluoropolymer coating on the aluminum windows that the Owner expects to last 30 years is of no benefit to the Owner if the coating fails to perform in year 6 or 11.
- The warranty period is so short that the building component almost surely will not be exposed to the “design condition” or even anything near the design condition. For instance, the new windows could easily make it through the 2-year manufacturer’s warranty period without experiencing a heavy wind driven rain. In year 3 or 4, the Owner discovers widespread leakage but has no rights under the warranty. Legal action may be his only recourse.

### Abuse of Express Warranties

All too often, unwary Owners and Architects get a false sense of security from warranties. They often will let their guard down if a warrant is provided, resulting in a **less reliable** building and **increased chance** that they will have to make a warranty claim. Some of the common mistakes Owners and Architects should avoid include the following:

Never accept an inferior design over a superior one just because the warranty of the inferior design looks better. Manufacturers use promises of

extended or enhanced warranties to entice buyers. Take the better design and make sure the product is built to last, not “warrantied” if and when it fails. Research the track record of the product in the climate and exposure matching that of your building.

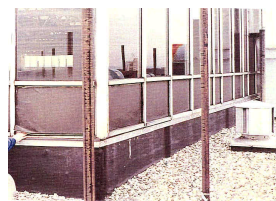
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“... many latent defects may take years to appear, long after the warranty period has elapsed.”

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Never accept defective or nonconforming work from the General Contractor on the premise that if there is a problem, it will show up in the first year and the Contractor can make good under the one-year warranty. As we said above, many latent defects may take years to appear, long after the warranty period has elapsed.

Never rely on warranties to assure yourself that construction is being performed in a proper manner and in accordance with the design. The Owner should make sure that the Architect and/or a qualified agent such as a construction monitor or clerk of the works makes frequent site visits to inspect the contractor’s work. Be vigilant to prevent construction of latent defects into the building. Once all the concealed work has been covered up, it will be very hard to prove who is responsible for the defects.



#### Formula for Success?

A 10-year warranty on a rubber roof from a reputable manufacturer who promptly attends to all leakage claims sounds like a successful outcome for a New Jersey condominium, right? Wrong. Leakage continued despite

numerous good faith attempts by the manufacturer to make roof repairs. A long and costly investigation determined that leakage was actually coming from brick masonry and glass and metal curtain walls adjacent to the roof; these elements had no warranty and no one to stand behind their performance. Moral? – Warrantied systems attract blame because they are warrantied. In the meantime, damage to the building continues from the real leak sources.

## Tips for Making Warranties Work to Your Advantage

*Try to improve on the one-year General Contractor's warranty included in the AIA General Conditions. We have found that reputable contractors are amenable to a two-year warranty period, doubling the industry standard period for discovering construction defects.*

*Write a two-year warranty into each section of the specifications. This makes each subcontractor as well as the General Contractor directly responsible to the Owner for construction defects in the work of that section. It also helps to avoid gaps in the warranty coverage. If the Owner makes a warranty claim on window leakage and it is discovered that defective flashing workmanship is the cause, that subcontractor is required to make good on the warranty. Include the costs of removal and replacement of assemblies required to uncover and repair or replace defective construction.*

*Don't assume that the manufacturer's standard warranty is the best you can do. If the industry standard 10-year warranty is pro-rated, ask for a non-pro-rated 10-year warranty in the specifications. Manufacturers will make concessions in a competitive bid environment.*

*Make sure the manufacturer explicitly accepts the design of surrounding or otherwise related construction.*

## Conclusion

Don't let yourself get burned by warranties. Remember that a warranty claim, like an insurance claim, is hardly reason to rejoice.

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**“Use warranties wisely, recognizing that, in a real claim, your out-of-pocket costs will still be considerable...”**

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We buy fire insurance, and then do everything in our power to make sure fires don't happen. Use warranties wisely, recognizing that, in a real claim, your out-of-pocket costs will still be considerable, as will your interruption costs from loss of building use during the repairs.

Questions, comments, or suggestions? Email the authors at [jkl@leavittassoc.com](mailto:jkl@leavittassoc.com) or visit our web site at [www.leavittassoc.com](http://www.leavittassoc.com)

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