

# A Guide to Renovation and Repair Contract Warranties

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**A**fter being retained to review the merits of several major disputes involving the scope of warranties in renovation and repair projects, it became obvious that owners, contractors, engineers, and legal counsel typically have differing views regarding construction contract warranties. Typically the contract format used in renovation and repair programs is the standard construction contract form AIA 101, published by the American Institute of Architects (Fig. 1). This contract form was developed by the American Institute of Architects as a consensus document with input from designers, contractors, attorneys, and owners for new construction and addition projects. Many times, this contract is modified by the parties to the contract to more stringently address issues such as insurance coverage, limitations of liability, and liquidated damages.

The warranty provisions are rarely modified except to extend the standard 1-year warranty period. Figure 2 is a reproduction of the warranty requirements from the standard AIA 201-1997, "General Conditions of the Construction Contract." As shown, the language is general in nature and may not fully relay the intended extent of warranty coverage or the responsibilities of the parties to the

contract regarding implementation of warranty work. This is especially true in repair programs where the contract work addresses only specific areas of a project, such as repair of deteriorated concrete on balconies, and not the complete project, as in construction of a new building. Under the balcony repair scenario, it is almost certain that the complete balcony will not be demolished and reconstructed.

More likely, only deteriorated areas specifically identified will be repaired. Is future deterioration of areas on the balcony outside of the areas repaired covered under the standard AIA 201 construction warranty provisions? The answer to this question obviously depends on which side of the contract you stand. To the owner, the answer is probably "yes." To the contractor, the answer is probably "no." Thus begins the dispute and potential legal claims.

The purpose of this article is to identify the major areas of conflict that arise when pursuing warranty remedies under a typical repair program contract so that future contracts can be improved to better define the coverage and responsibilities in warranty clauses.



Fig. 1: Standard AIA 101 contract form

## 3.5 WARRANTY

**3.5.1** The Contractor warrants to the Owner and Architect that materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will conform to the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, modifications not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

Fig. 2: Standard AIA 201 warranty clause

## Contract Documents

The contract documents include the specifications and plans for the work, which are typically incorporated into the construction contract by reference. These two documents should fully describe and show the work to be performed under the contract and the locations on the building or structure included under the contract.

The specifications verbally describe the work, procedures to be followed, the products and materials to be supplied, and installation requirements for the work being performed under the contract. The specifications are narratives of the overall project and expectations for the project. The plans graphically depict the assembly of the work and the locations where the work is to be performed. Dimensions, general appearance, and the relationship between components of the work are relayed to contractors through the plans. The specifications and plans are complimentary and serve to communicate the project-specific requirements of the contract.

Rarely is it feasible to define the work involved in a major renovation or repair program through the use of only one of these documents. At a minimum, a set of project specifications and plans should include the components listed in Table 1 to adequately define a project. A clear description of the work to be performed at the beginning of a project not only prevents confusion during the project but also serves as a record that clearly defines the responsibilities of the parties and the work performed under the contract. This record is important for future reference during implementation of warranty repairs because memories fade and the original parties participating in the project may not be available to lend assistance in defining the work that was originally performed under the contract.

## Warranty Provisions

The provisions of the warranty for a major renovation or repair program should be better defined than the standard AIA warranty clause. Better definitions are required to address the inherent differences in a renovation or repair project as compared with new construction projects. Typically, in new construction, the contractor is responsible for supplying and installing all of the components in a structure through its own forces or through subcontractors. In a repair project, a large portion of the existing structure may be left as it was originally constructed, with only specific portions of the structure repaired with the repairs incorporated into the existing structure's components. Also, repair programs are almost always performed on occupied structures that must frequently remain in use through the course of a repair program and, later, during any warranty work.

As such, the following specific provisions should be considered for inclusion in the contract warranty and incorporated into the repair construction contract:



*Full-scale balcony renovation project*

*Table 1: Required components of project specifications and plans*

Project specifications	Project plans
Contract for construction	Site plan
General conditions of the contract	Identification of work areas
Description of the project	Building elevation views
Required bonds:	Building plan views
Bid bond	Extent of the work
Performance bond	Phasing plans
Payment bond	Typical details
Warranty bond	Detail locations on plan
Phasing of the project	Elevation views
Description of the work	Protection details
Quantity measurement	Shoring details
Payment methods	Reinforcing schedules
Project coordination	Finish schedules
Project protection	
Project cleaning	
Project close-out	
Materials and products	
Hazardous materials	
Special requirements	
Technical specifications	

- The length of the warranty period after acceptance of the work by the owner with the initiation date set by a certificate of final completion executed by the owner;
- Specific requirements for a warranty bond, written warranty agreement, or escrow funding as a warranty guarantee;
- The party to be financially responsible for the cost of performance of a warranty survey to document the warranty repair work under the contract. This is typically the owner's responsibility;

- The party to be financially responsible for the cost of any staging required to execute the warranty survey. Again, this is often the owner's responsibility, but responsibility for this cost can be transferred to the contractor through appropriate contract requirements;
- Start date of the warranty inspection after final acceptance of the work by the owner;
- Requirement for the contractor and any subcontractors to participate in the warranty inspection and for the owner to include the contractor in the warranty inspection process;
- Definition of performance requirements for the contract work that, if not met, will define and require repair under the contract warranty;
- Requirement that finished surfaces (such as painted surfaces) be fully restored at areas of warranty repairs;
- Requirements for obtaining and payment of fees for a building permit for the warranty repair work, if required;
- Contractor and owner insurance requirements;
- Provisions for protection of the property and grounds; and
- Release of contractor's warranty obligations upon satisfactory completion of warranty repairs.

As in the preparation of any contract, the warranty provisions should be prepared and coordinated with the overall contract by competent legal counsel representing the owner. The project designer should be included in development of the warranty provisions to define the technical requirements of the project and the performance criteria for the contract work.

## Warranty Inspection Scheduling

Defining the timing of a formal warranty inspection in the construction contract is important so that the owner and contractor agree when warranty repairs will be executed. At the end of the project, a punch list inspection is generally performed by the project designer and the contractor. Under certain circumstances, a representative of the owner may be involved in the punch list inspection.



*Failed concrete repair and failure in original adjacent concrete. Covered by warranty?*

This inspection is intended to detect obvious problems with the contractor's work, such as finish appearance, incomplete work items, and project cleaning. Upon the contractor's completion of the punch list generated during this inspection, the owner accepts the project as complete, issues a certificate of final completion, and the warranty period begins.

A typical warranty for a major repair program may extend from 1 to 5 years. Warranties of 20 or more years may be available for certain work such as roofing and below-grade waterproofing projects. If a bonded warranty is required by the owner, the contractor's bonding company may only issue a warranty bond for a maximum period of 2 years. Additional yearly renewals may be available, at the option of the bonding company, with the cost of the extension to be borne by the owner.

A formal warranty inspection should be performed at least 6 months prior to the expiration of the warranty period. More time should be allowed for projects with construction contract values exceeding \$1 million. The contractor should be invited, and preferably required by contract, to actively participate in the warranty inspection to avoid disputes and delays regarding warranty items recorded during the warranty inspection.

The length of time suggested may seem more than ample to identify and agree upon the scope of warranty work. However, precious time can be lost in arranging access to the property; coordinating schedules between the owner, designer, and contractor; and in consulting with counsel should legal questions arise. A suggested schedule of milestones is presented in Table 2 to serve as a guide in implementing a formal warranty inspection.

## The Warranty Inspection

With a schedule in place for timing of the warranty inspection, the actual execution of the inspection remains. At this point, the owner is often tempted to perform the warranty inspection in-house using management or maintenance personnel to define and record warranty repair items.

While this practice may seem cost-effective and logical, it often results in confusion, disputes, and incomplete recording of warranty items. Most property management and maintenance personnel are typically familiar with the repair program performed at the property if they were on staff at the time the work was performed. However, much of their involvement with the project was probably related to coordination and scheduling during execution of the work and in dealing with the daily headaches that accompany a major renovation repair program. They are not generally versed in the technical aspects of the project or experienced in performing construction inspections. Also, depending on how well the project was executed,

there may be internal pressures or personal issues that could influence the objectivity of their inspection.

If at all possible, the warranty inspection should be performed by the original designer. If this is not possible, an independent licensed technical professional with experience in the type of work performed should be retained to conduct the inspection. Contractors tend to be more receptive to the opinions and warranty lists developed by licensed technical professionals acting as an independent third party rather than those developed by the owner's property management or maintenance staff.

### Pre-Inspection Meeting

Prior to starting the inspection, it is advantageous to schedule a meeting with the contractor to discuss the owner's intent and timing for starting the warranty process. A review of several typical areas exhibiting examples of the owner's and designer's warranty issues should be performed to inform the contractor of the opinions of the parties. Disagreements in opinions between the owner and contractor concerning warranty issues can usually be identified during this meeting and resolutions developed before a large amount of time is expended on inspections.

The results of the pre-inspection meeting should be documented in a set of meeting minutes recording the issues addressed and the plan for resolving any differences in opinion. Additional meetings may be required to resolve all of the issues raised and to coordinate the inspection activities. If at all possible, an agreed-upon list of warranty repair items should be developed to guide the warranty inspection survey.

### Accessing the Work

Depending on the type of repair program performed, access to the work to conduct the warranty inspection can be simple or extremely complicated. For example, inspection of repairs executed on the balconies of a high-rise residential project requires significant scaffolding and protection. If the inspection is conducted by accessing the balconies through the units, contacting residents and scheduling access to the units can be a full-time task for property management staff. If the inspection is conducted from staging erected on the building exterior, significant coordination is still required to notify residents that workers will be visiting at some point in the future. Roof access, electrical access, and ground-level protection must also be coordinated. The cost of staging rigging and rental are also important considerations. The contract documents should consider how the inspection will be conducted so that the least disruptive access to the work is provided.

If staging or other means of access are significant cost considerations, then the cost responsibility should be defined in the contract documents. The present custom is that the owner is financially

Table 2: Milestones for implementing a warranty survey and warranty repair program

Time frame	Activity
End of project	<ul style="list-style-type: none"> <li>• Issue certificate of final completion</li> <li>• Obtain written warranty and warranty bond</li> </ul>
Six months prior to warranty expiration	<ul style="list-style-type: none"> <li>• Start planning for warranty inspection</li> <li>• Schedule meeting with contractor</li> <li>• Define warranty concerns</li> <li>• Set inspection time frame</li> </ul>
Five months prior to warranty expiration	<ul style="list-style-type: none"> <li>• Arrange access to work areas</li> <li>• Confirm contractor's participation</li> <li>• Draft list of covered warranty items</li> <li>• Draft post-construction warranty agreement</li> <li>• Develop warranty inspection forms</li> <li>• Schedule inspection start date</li> </ul>
Four months prior to warranty expiration	<ul style="list-style-type: none"> <li>• Start warranty inspection</li> <li>• Negotiate post-construction warranty agreement</li> <li>• Prepare warranty survey report and deliver to contractor</li> </ul>
Three months prior to warranty expiration	<ul style="list-style-type: none"> <li>• Schedule meeting with contractor to review warranty survey report</li> <li>• Execute post-construction warranty agreement</li> <li>• Schedule warranty repair start date</li> </ul>
One to two months prior to warranty expiration	<ul style="list-style-type: none"> <li>• Obtain building permit, if required</li> <li>• Schedule pre-construction meeting</li> <li>• Start warranty repair work</li> </ul>

responsible for providing the access required to conduct the inspection. However, provisions can be included in the contract for the contractor to provide access or a cost-sharing arrangement between the owner and contractor can be included in the contract provisions.

### Recording Warranty Items

During the inspection, warranty repair items should be recorded on forms developed for the specific project. The forms should be easy to use and easily understood by others not participating in the actual inspection. The minimum information contained on the inspection form should be:

- A drawing of the area being inspected. Plan, elevation, and section views may be required to fully describe the area being inspected. Observations should be sketched on the drawings to provide the general location of the area inspected;
- A writing area for recording comments, description, frequency, and size of warranty items. Observations such as existing damage, nonwarranty items, and unusual conditions should also be recorded;



*Warranty inspection using exterior swing staging. No unit access required*



*Completed balcony renovation project*

- A line to record the date, persons performing and witnessing the inspection, and the location or unit being inspected; and
- A line to record information after warranty repairs are executed including the date and persons verifying the completed warranty repairs.

The inspection survey forms serve as a record of warranty claims by the owner and can be summarized in table form to generally quantify the extent of warranty work claimed. They can also be included as record documents in post-construction warranty resolution agreements between the owner and contractor. The forms should also be used to inspect completed warranty work to ensure that all items were addressed and that no damage occurred to surrounding or adjacent areas.

As previously stated, it is advantageous to involve the contractor in the warranty inspection. Preferably, a representative of the contractor should accompany the owner's representative during the inspection of all areas in question. Mutual discussion and agreement on work items encountered can most effectively be carried out on-site at the area in question. If the contractor cannot be included in the warranty inspection, representative photographs of claimed warranty items should be taken and included in a warranty inspection summary.

## Warranty Agreement

The warranty claim summary, including individual inspection survey forms, should be included in a formal agreement for the contractor to begin work on the warranty claims. The contents of the agreement will depend on the complexity of the work. With the warranty claim summary in hand, the owner and contractor should have a good understanding of the scope of the work. The agreement should address:

- Obtaining building permit, if required;
- A project schedule and work hours;
- Project staffing and worker qualifications;
- Protection of the property;
- Project cleaning; and
- Release of the contractor's warranty obligations after completion of warranty claim work.

Many owners assume that the warranty period renews after warranty repairs are once completed by the contractor. Generally, the execution of warranty repairs does not reactivate the warranty term on the warranty work performed or the remainder of the original work not addressed under the warranty claim. A construction warranty is similar to the warranty on a new car—as soon as the warranty period expires, additional repairs are the responsibility of the owner. Expect the contractor to insist on a warranty release upon completion of the warranty work.

## Successful Programs

The contract warranty provisions and planning required to implement a successful warranty program are an essential part of all major renovation and repair projects. The warranty is often given less attention than the remainder of the project requirements, starting, in many cases, long after the completion of the overall repair program. The provisions, project development guidelines, and planning steps outlined in this article can help achieve the implementation and successful completion of contract warranty requirements.

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