

# **UNDERSTANDING THE CONSTRUCTION COMPLIANCE PROVISIONS OF THE WASHINGTON STATE CONDOMINIUM ACT CHAPTER 64.55 RCW SECTIONS .005 THROUGH .090 (PREVIOUSLY KNOW AS - ENGROSSED HOUSE BILL 1848 - SECTIONS 1 THROUGH 10)**

## **INTRODUCTION**

This section of the web site was developed to help building owners, developers, home owner associations, and all professions associated with the development and construction of multifamily residential buildings navigate the design, construction, and inspection requirements of Chapter 64.55 RCW (previously knows as EHB 1848).

In the development of this web site a large part of the committee's discussion and focus centered on when and how Chapter 64.55 RCW (EHB 1848) applies to multifamily buildings. To this extent a large part of the web site is dedicated to educating the building owner, developer, home owner associations, and professions. Chapter 64.55 RCW (EHB 1848) affects building requirements at many levels including design, the permit process, inspection and testing, and the overall construction process. As with any law we recommend that you consult legal council and your local Building Department if you feel additional clarification is warranted.

## **RELATIONSHIP OF EHB 1848 (CHAPTER 456, LAWS OF 2005) TO CHAPTER 64.34 RCW – CONDOMINIUM ACT.**

Sections 64.55.005 through 64.55.090 of Chapter 64.55 RCW are the direct conversion into law of the previously known Sections 1 through 10 of EHB 1848.

- 1) EHB 1848 has become Chapter 64.55 RCW – Construction defect disputes – multiunit residential buildings.
- 2) When dealing with condominiums, both laws in Chapter 64.34 RCW and Chapter 64.55 RCW are in effect and must be complied with.

Chapter 64.55 RCW clearly relies on Chapter 64.34 RCW (Condominium Act), without which it would not exist in coherent form. That is to say that Chapter 64.55 leans on, and expands, the Condominium Act. Of particular interest in this regard is Section 64.34.020 – Definitions.

- 3) The effect on 64.34 RCW was to revise/amend sections 64.34.100 – Remedies liberally administered (EHB 1848 - Section 20), 64.34.410 – Public Offering Statement – General Provisions (EHB 1848 - Section 19), and 64.34.415 – Public Offering Statement – Conversion condominiums (EHB 1848 - section 18), and added Section 64.34.073 – Application of Chapter 64.55 RCW (EHB 1848 - Section 20).

## **LINKS TO WASHINGTON STATE LAWS**

### **TITLE 64 RCW Real Property and conveyances**

<http://apps.leg.wa.gov/RCW/default.aspx?cite=64>

### **Chapter 64.34 RCW Condominium act**

<http://apps.leg.wa.gov/RCW/default.aspx?cite=64.34>

### **Chapter 64.55 RCW Construction defect disputes - multiunit residential buildings**

<http://apps.leg.wa.gov/RCW/default.aspx?cite=64.55>

### **ENGROSSED HOUSE BILL 1848**

<http://www.leg.wa.gov/pub/billinfo/2005-06/Pdf/Bills/House Passed Legislature/1848.PL.pdf>

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**OVERVIEW OF WASHINGTON STATE LAW - TITLE 64 RCW - CHAPTER 64.55 RCW - SECTIONS .005 THROUGH .090 (ENGROSSED HOUSE BILL 1848 - SECTIONS 1 - 10)**

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**RCW Sections**

**64.55.005 (EHB 1848 - Section 1) Application.**

- Any multiunit residential building with permit issued after August 1, 2005
- Exceptions - Section 10 for a condominium conversion with public offering statement prior to August 1, 2005
- See Section 2 - Definitions for “multiunit residential building”

**64.55.010 (EHB 1848 - Section 2) Definitions.**

- Subsection (6) “Multiunit Residential Building”
  - Sub-Subsection (6)(a)(vi) All units held under one ownership and subject to irrevocable sale prohibition covenant (defined in Subsection (10))
- Subsection (9) “Rehabilitative construction”
- Subsection (10) “Sale prohibition covenant”
  - Five year term - after five years revert to Section 10

**64.55.020 (EHB 1848 - Section 3) Building permit application--Submission of design documents.**

- Requires “Building enclosure design documents”
- Changes require “stamp” and submission to Building Department and “person conducting the course of construction inspection”
- Building Department shall not issue permit without statement

*A stamped statement by the person stamping the building enclosure design documents in substantially the following form: “The undersigned has provided building enclosure documents that in my professional judgment are appropriate to satisfy the requirements of the section .010 through .090 of this act.”*

- Building Department not charged with determining adequacy of documents

**64.55.030 (EHB 1848 - Section 4) Inspection required.**

- Multiunit buildings require inspection by “qualified inspector” - see Section 5

**64.55.040 (EHB 1848 - Section 5) Inspectors--Qualifications.**

- Substantial and verifiable training
- Free from improper interference or influence
- No affiliation with project but may be the Architect of Record or the design professional who approved enclosure design documents or may assist with preparation of enclosure design documents

**64.55.050 (EHB 1848 - Section 6) Scope of inspection--Definitions.**

- Water penetration testing of representative sample of windows and window installation
- Exception for “project” and two year time window
- Independent periodic review to ascertain if enclosure is built in substantial compliance with enclosure design documents
- Rehabilitative - exception for window testing if windows not altered

**64.55.060 (EHB 1848 - Section 7) Certification--Certificate of occupancy.**

- Qualified inspector submission of letter prior to Building Department issuing C of O  
*“... a signed letter certifying that the building enclosure has been inspected during the course of construction... and has been constructed .... in substantial compliance with the building enclosure design documents, as updated pursuant to Section 3”*

**64.55.070 (EHB 1848 - Section 8) Inspector, architect, and engineer--No private right of action or basis for liability against.**

- No private right against inspector, architect or engineer
- No independent basis for liability
- May contractually agree to the amount of liability

**64.55.080 (EHB 1848 - Section 9) Inspector's report or testimony--No evidentiary presumption--Admissibility.**

- *Refer to section for scope*

**64.55.090 (EHB 1848 - Section 10) Sale of condominium unit subject to compliance--Inspection alternate**

- No sale of condominium without complying with Sections 1 through 9 unless inspected by qualified building inspector
- Invasive condition assessment
- Evaluation and report on present condition including recommendations for any repairs
- Public offer statement must include condition assessment report and repairs made

## **INTRODUCTION TO THE CONSTRUCTION PROVISIONS OF WASHINGTON STATE LAW - TITLE 64 - CHAPTER 64.55 RCW (ENGROSSED HOUSE BILL 1848)**

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Construction defects and resulting litigation have severely impacted the multifamily construction industry. Many liability insurance providers have discontinued servicing this market sector. Those who remain have significantly raised insurance premiums and restricted or reduced coverage. The state legislature has acted comprehensively in House Bill 1848 to address multifamily; construction, litigation, arbitration, and condominium conversion.

Engrossed House Bill 1848 was passed by the 2005 legislature and went into effect on August 1, 2005 as incorporated into Washington State Law - Title 64 - Chapter 64.55 RCW. The law addresses new and existing multiunit residential buildings. It includes provisions for additional design, construction inspection, conversion to condominiums, and litigation for construction defects. This document is intended to summarize the construction and inspection requirements and their anticipated impact on;

[□Architects and Engineers](#)

[□Developers](#)

[□Contractors](#)

[□Subcontractors](#)

[□Multiunit Residential Building Owners](#)

[□Building Departments](#)

There is a great deal of conjecture as to the cause of increased defects or failures in multifamily construction. Some causes put forward include;

- Increased use of wood frame construction on larger more complex structures
- Increased use of engineered wood products, and wood products with less resistance to decay
- Larger and taller buildings with less overhead protection
- Increased use of horizontal waterproofed surfaces
- Increased thermal insulation and decreased airflow
- Reduced vetting of subcontractors by developers and general contractors
- Reduced construction trade staff working directly for general contractors, or reduced oversight by general contractors
- Shortage of skilled workers, or failure to properly train and supervise workers
- Increased reliance on subcontractors to deliver quality construction at the lowest possible cost
- Designs focused on permit requirements rather than good construction practices
- Lack of participation of design professionals in the construction process
- Lack of meaningful inspection

The new law does not directly address all of the above supposed causes of defective construction. It does mandate increased design requirements and increased professional oversight throughout the construction process. Compliance with the new requirements increases the probability that construction problems will be identified and addressed during design and construction.

### **Applicability**

House bill 1848 does not apply to;

- Single family homes
- Duplexes
- Zero lot line attached housing
- Mixed use buildings with less than three residential units
- Hotels
- Dormitories

## **Impact of Chapter 64.55 RCW (Engrossed House Bill 1848) on Architecture and Engineering Service Providers**

Over the past several years, Architects, Engineers, and Building Envelope Consultants have found increased demand for comprehensive design services and construction support particularly on the building envelope. These services have been engaged by builders who have willingly shouldered the cost of such services, in order to improve their product, manage their risks, and avoid costly defects. The benefits of such professional participation have spread to all multifamily and some single-family construction; even those projects where design professionals were not engaged.

House Bill 1848 mandates professional participation in the design of the building envelope and inspection of the ongoing work. All developers of multifamily construction will now be required to bear the cost of increased design work and inspection services.

The changes legislated by House Bill 1848 are intended to bring design professionals into the construction process on all multifamily construction. Professionals active in this market will see a significant increase in demand. The law should result in a more stable market for these services, allowing participating professionals to invest in the infrastructure required to provide professional services to the multifamily construction industry.

Good construction does not happen by accident. It begins with good design. It requires qualified general contractors, subcontractors, project managers, supervisors, and trades people. It requires good planning and coordination, and it requires participation of the design professionals. The new law does not mandate all necessary aspects of good construction; nevertheless, it does increase the influence of design professionals and provides opportunity to improve the construction process.

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## **Impact of Chapter 64.55 RCW (Engrossed House Bill 1848) on Developers**

Good construction does not happen by accident. It begins with good design. It requires qualified general contractors, subcontractors, project managers, supervisors, and trades people. It requires good planning, coordination, cooperation, and participation of design professionals.

The requirement for increased professional participation will benefit those developers who embrace good construction practices.

Developers increasingly turn to Architects and Building Envelope Consultants for comprehensive design and construction support. Many have voluntarily shouldered the cost of such services to improve their product and avoid costly defects. This professional participation has trickled down improving quality of multifamily and single-family construction, even on projects where design professionals were not engaged.

Professional participation is no longer voluntary. All multifamily developments will now bear the cost of detailing and inspection of the building envelope.

The cost of good construction practices will not significantly rise. Those developers who have regularly engaged such services will benefit from a level playing field. Those developers who have not utilized such professional oversight will now be required to include the cost in their projects. All builders will benefit from the increased opportunity to identify and eliminate construction problems during design and construction.

The new requirements are applicable to the entire State of Washington. The rapid growth and wet climate of Vancouver, BC, the Greater Seattle area, and the Portland-Vancouver, Washington area has resulted in a regional concentration of building envelope failures. Those regions with the greatest failures subsequently have many design professionals able to provide design assistance and technology.

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## **Impact of Chapter 64.55 RCW (Engrossed House Bill 1848) on Contractors**

Good construction does not happen by accident. It begins with good design. It requires qualified general contractors, subcontractors, project managers, supervisors, and trades people. The new standard will add design requirements and a third party inspector. The general contractor will no longer be the sole authority charged with determination of what building envelope work is acceptable. It will be the general contractor's obligation to satisfy the inspector and or designer that the design is followed.

Construction services are and will remain a very competitive industry. The requirement for increased professional participation will benefit those contractors who embrace good construction practices, training, and quality control. The cost of good construction practices should not significantly rise; however, there will be increased demand for the best subcontractors and knowledgeable superintendents. The cost will be greater for those operations that did not have equivalent procedures in place. Good builders will benefit from a level playing field. All builders will benefit from the increased opportunity to identify and eliminate construction problems during design and construction.

General contractors who do not provide quality control oversight of sub-trades may want to consider implementing in-house inspection of all trade work by knowledgeable superintendents and project managers to eliminate problems sooner and avoid costs of correction of non-compliant work.

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## **Impact of Chapter 64.55 RCW (Engrossed House Bill 1848) on Subcontractors**

Inspection should result in greater demand for high quality trade work. Subcontractors who are professional and engaged, and properly trained trades-people should benefit in a market with increased inspection and oversight. All subcontractors will be able to increase their quality and corresponding price structure ultimately resulting in a more profitable and stable market.

Subcontractors who adapt well to the design and inspection process will benefit from reduced risk and less pressure to eliminate critical components or procedures.

Subcontractors who do not adapt to the design and inspection process and fail to accept the authority of the third party inspectors will risk contract and payment issues.

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## **Impact of Chapter 64.55 RCW (Engrossed House Bill 1848) on Property Managers, Apartment Building Owners, and Condominium Associations**

### **Better Construction**

House Bill 1848 is intended to reduce defects in newly constructed or converted condominiums. Additional design and inspection requirements are intended to improve the multiunit housing product. Home buyers should be able to purchase new homes with increased confidence that the building exterior will protect their investment from the environment.

### **Not Just For Developers and Builders**

The design and construction provisions of House Bill 1848 are not just intended for developers and contractors. The same design and inspection provisions are applicable to rehabilitative repairs to existing multiunit buildings. Any work to the building envelope including below grade waterproofing, cladding, exterior horizontal surfaces, windows, doors, and the roof are subject to the construction provisions of the bill. There are no exemptions to the requirements of this bill; however there are provisions to exempt the owners from the design, construction, and inspection requirements should their repairs not meet the [rehabilitative](#) standard, or if it is subject to a recorded sale [prohibition covenant](#).

There is great variety in the construction and condition of multi-residential buildings. A good understanding of a buildings' construction is critical to proper maintenance and repair.

Prior to the implementation of House Bill 1848, repair decisions were left to the owners and condominium association boards, which might or might not have sought out professional assistance. The pressure of limited financial resources often weighed heavily on repair decisions. Often financially pressured owners chose lower cost repairs that addressed symptoms rather than causes of building envelope problems.

Professional oversight is now required before undertaking rehabilitative repairs. Design documents must be prepared and stamped by a licensed Architect or Engineer. Associations can choose licensed construction professionals to guide them from the beginning, or contractors (design build service) who engage licensed professionals to provide stamped design documents.

Inspection of repair work is also required. Licensed design professionals can provide design and inspection services. Many licensed professionals also provide contract administration services. An owner who chooses a design-build contractor must also engage a qualified party to provide independent inspection services.

### **Rehabilitative Work**

Repair projects that are valued at less than 5 percent of the assessed value are not considered rehabilitative and are not required to follow the design, construction, and inspection provisions. Owners of buildings undergoing such projects are required to submit a letter certifying that the project does not exceed 5 percent of the assessed value to the building department. Permits may still be required by the local building department, even if the value of the work is less than 5 percent. You should contact the local building department to determine whether a permit is required before undertaking even minor repairs.

### **Prohibition Covenant**

Apartment buildings are subject to the same provisions as condominiums unless a recorded 'Sale Prohibition Covenant' is filed in compliance with the provisions of Chapter 64.55 RCW (Engrossed House Bill 1848).

## **INTERPRETATION OF COMPLIANCE REQUIREMENTS FOR:**

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## **Impact of Chapter 64.55 RCW (Engrossed House Bill 1848) on Building Departments**

The design and inspection requirements specified by House Bill 1848 are intended to be accomplished in the private sector. Building departments throughout the state have adapted procedures and policies to address the additional requirements for multifamily construction. Most building departments have determined that their role is limited to verification of the submittal of stamped design documents and collection of the final inspection certificate at the completion of the work.

You should always contact your building department to determine design permit and inspection requirements on any project.

## **Impact of Chapter 64.55 RCW (Engrossed House Bill 1848) on Inspectors**

Prior to enactment of the current law, building envelope designers and consultants typically provided individuals qualified to monitor or inspect and document installation of building envelope components when required during a specific project. These individuals and the firms they represent have developed a quality assurance system model, which should work well within the context of Chapter 64.

The application of the construction provisions will most likely generate a greater work load than the established envelope consulting firms are able to handle.

The construction provisions of the Bill will provide many opportunities of qualified building envelope professionals to participate in the construction process as building envelope inspectors. Reference Page 19 for qualifications.

The building envelope inspector becomes an important independent member of the team. It is important that they be able to communicate discrepancies quickly and effectively to the builder and designer for correction or clarification.

Failure to clearly communicate and follow up on uncorrected, non-conforming work in a timely manner can affect the progress of the work. The inspector can affect the issuance of a certificate of occupancy if they are unable to submit a final letter certifying conformance.

Liability - Section 8 of the law protects the individual inspector from liability for their actions, as it is written. However, it does provide for contractual agreements in which the inspector agrees to accept a specific amount of liability.

Following are some examples of **rehabilitative** and **non-rehabilitative** projects.

#### **Example 1 Waterproof Membrane**

The waterproof membrane at decks on Building A is being replaced. The value of the new waterproofing is \$60,000. Building A is a 12 unit building with a combined tax assessed value of \$2.4 million.  $\$2,400,000 * 0.05 = \$120,000$ . The value of the work is significantly less than the 5 percent threshold for the building making it **non-rehabilitative**. Stamped design documents addressing waterproofing and inspection are unlikely to be required. If the owner chooses to proceed without professional assistance, he or she must submit a letter to the building department certifying the value of the repair is less than the 5 percent rehabilitative threshold.

#### **Example 2 Deck Reconstruction**

The waterproof decks on Building W are being reconstructed. The value of the deck reconstruction is \$180,000. Building W is a 12 unit building with a combined tax assessed value of \$2.4 million.  $\$2,400,000 * 0.05 = \$120,000$ . The value of the work exceeds the 5 percent threshold for the building; therefore, it is **rehabilitative**. Stamped design documents addressing waterproofing and inspection will be required in addition to the building permit addressing the structural repairs.

#### **Example 3 Multi-building Complex**

The waterproof decks on Building Z are being reconstructed. The value of the deck reconstruction is \$180,000. The condominium is a ten building complex valued at \$24 million. Building Z is a 12 unit building with a combined tax assessed value of 2.4 million. It is likely that the building department would calculate the cost/value ratio only on the building that is being repaired.  $\$2,400,000 * 0.05 = \$120,000$ . The value of the work exceeds the 5 percent threshold for the building; therefore, it is **rehabilitative**. Stamped design documents addressing waterproofing and inspection will be required in addition to the building permit addressing the structural repairs.

#### **Example 4 Roof Replacement**

The roof on Building X is being replaced. The value of the roof replacement is \$150,000. Building X is a 12 unit building with a combined tax assessed value of \$2.4 million.  $\$2,400,000 * 0.05 = \$120,000$ . The value of the work exceeds the 5 percent threshold; therefore, it is **rehabilitative**. Stamped design documents addressing waterproofing and inspection will be required.

#### **Example 5 Roof Replacement**

The roof on Building Q is being replaced. The value of the roof replacement is \$150,000. Building Q is an 18 unit building with a combined tax assessed value of \$3.6 million.  $\$3,600,000 * 0.05 = \$180,000$ . The value of the work is less than the 5 percent threshold making it **non-rehabilitative**. Stamped design documents addressing waterproofing and inspection are unlikely to be required. If the owner chooses to proceed without professional assistance, he or she must submit a letter to the building department certifying the value of the repair is less than the 5 percent rehabilitative threshold.

#### **Example 6 Public Housing**

Public housing agencies and/or non-profits that build or purchase multiunit buildings and hold them generally execute and record a "condominium sale prohibition covenant" to run for the five year minimum, until terminated.

## **New Condominium Construction**

Our understanding of Washington State Law - Chapter 64.34 RCW - Condominium Act now incorporates Chapter 64.55 RCW Construction defect disputes - multiunit residential building, the tasks outlined below appear to be required to comply with this law and specifically Chapter 64.55 RCW (previously known as Engrossed House Bill (EHB) 1848). We recommend that you consult legal counsel to assure that all legal requirements are being met with respect to the law.

1. For a new building(s), a certification letter, signed and sealed by the Building Envelope Consultant, is required with the submittal of the building enclosure design documents for a building permit that states essentially, "The scope of work is appropriate to satisfy the requirements of Sections .005 through .090 of Title 64.55 RCW."
2. To meet the WSCA requirements for "independent periodic review of the building enclosure during the course of construction" the following is required:
  - The construction work must be inspected by a Qualified Building Envelope Inspector who can be the Building Envelope Consultant or a separate entity.
  - Changes to the envelope work must be approved by the Building Envelope Consultant and submitted to the building department and to the Qualified Building Envelope Inspector and documented in the building enclosure design documents.
  - Window testing is required.
  - The Qualified Building Envelope Inspector must submit to the building department a certification letter at the completion of the work stating that the repair work was completed in compliance with the building enclosure design documents and any revisions that were made.
3. According to Section .090 of Chapter 64.55 RCW (Section 10 of EHB 1848), the initial sale of a condominium unit can only take place when all of the tasks listed in Sections .005 through .080 of Chapter 64.55 RCW (Sections 1 through 9 of EHB 1848) are met.

## New Apartment Building Construction

Our understanding of Washington State Law - Chapter 64.34 RCW - Condominium Act now incorporates Chapter 64.55 RCW Construction defect disputes - multiunit residential building, the tasks outlined below appear to be required to comply with this law and specifically Chapter 64.55 RCW (previously known as Engrossed House Bill (EHB) 1848). We recommend that you consult legal counsel to assure that all legal requirements are being met with respect to the law.

1. According to Section .005 of Chapter 64.55 RCW (Section 1 of EHB 1848), the act applies to any multiunit residential building for which a permit for construction or rehabilitative construction of such building was issued on or after August 1, 2005. As such, the following applies to the construction of an apartment **only if a "Sale Prohibition Covenant" will not be filed with the county** in which the building is located. If a "Sale Prohibition Covenant" is filed, it is our understanding that EHB 1848 does not apply.
2. For a new building(s), a certification letter, signed and sealed by the Building Envelope Consultant (who can be the Architect of Record), is required with the submittal of the building enclosure design documents for a building permit that states essentially, "The scope of work is appropriate to satisfy the requirements of Sections .005 through .090 of Chapter 64.55 RCW."
3. To meet the WSCA requirements for "independent periodic review of the building enclosure during the course of construction" the following is required:
  - The construction work must be inspected by a Qualified Building Envelope Inspector who can be the Building Envelope Consultant or a separate entity.
  - Changes to the envelope work must be approved by the Building Envelope Consultant and submitted to the building department and to the Qualified Building Envelope Inspector and documented in the building enclosure design documents.
  - Window testing is required.
  - The Qualified Building Envelope Inspector must submit to the building department a certification letter at the completion of the work stating that the repair work was completed in compliance with the building enclosure design documents and any revisions that were made.

Please note, it would appear that after the completion of Item 3, that the building(s) could be sold as a condominium, however based on our reading of Chapter 64.55 RCW (EHB 1848) it could be interpreted that an intrusive investigation would need to be performed and a report issued by a Building Envelope Consultant after it is decided to convert the apartments to a condominium to fulfill the requirements of converting an apartment to a condominium.

## Building Conversion to Condominium Building

Our understanding of Washington State Law - Chapter 64.34 RCW - Condominium Act now incorporates Chapter 64.55 RCW Construction defect disputes - multiunit residential building, the tasks outlined below appear to be required to comply with this law and specifically Chapter 64.55 RCW (previously known as Engrossed House Bill (EHB) 1848). We recommend that you consult legal counsel to assure that all legal requirements are being met with respect to the law.

1. For an existing building(s), building enclosure design documents signed and sealed by a Licensed Architect or Licensed Engineer (Building Envelope Consultant) are required to obtain a building permit in most municipalities if the cost of the work exceeds a specified cost or percentage of cost vs. value of the building, or if the work is viewed as more than normal maintenance.
2. According to Section .090 of Chapter 64.55 RCW (Section 10 of EHB 1848), the initial sale of a condominium unit can only take place when all of the tasks listed in Sections .005 through .080 of Chapter 64.55 RCW (Sections 1 through 9 of EHB 1848) are met or if an intrusive investigation of the as-built construction is conducted and a report is issued with recommendations to address observed conditions that are believed to adversely affect the performance of the building envelope. As such, the following items apply to the conversion of a building(s) to a condominium.
3. It appears that a scope of work for rehabilitative construction or building envelope repairs must be developed from which a repair cost estimate is prepared, a condition assessment must be prepared by a Qualified Building Envelope Inspector that:
  - Evaluates the present condition of the building enclosure including whether such conditions have adversely affected or will adversely affect the performance of the building enclosure.
  - Provides recommendations for repairs to the building enclosure that are necessary to repair a design or construction defect in the building enclosure that results in the failure of the building enclosure to perform its intended function and allows unintended water penetration and repair damage caused by such defects.
4. If the estimated cost of the envelope work is less than 5 percent of the assessed value of the building(s), the work is not considered rehabilitative construction (requirement of the municipality for a building permit may still apply), however you are required to:
  - Submit a letter to the building department stating that the building envelope repair costs are less than 5 percent of the assessed value of the building(s).
  - For the sale of condominium units, as part of a public offering statement, an inspection and repair report signed by the Qualified Building Envelope Inspector must be provided that identifies the extent of the inspection performed, information obtained as a result of the inspection, the manner in which any repairs required were performed, the scope of those repairs, and the names of the persons performing those repairs. This essentially requires periodic site inspection of the work by the Qualified Building Envelope Inspector that performed the initial intrusive investigation.
5. If the estimated cost of the envelope work exceeds 5 percent of the assessed value of the building(s), the work is considered rehabilitative construction, and the following is required:
  - A certification letter, signed and sealed by the Building Envelope Consultant, is required with the submittal of the building enclosure design documents for a building permit that states essentially, "The scope of work is appropriate to satisfy the requirements of Sections .005 through .090 of Chapter 64.55 RCW."
  - The rehabilitative construction work must be inspected by a Qualified Building Envelope Inspector who can be the Building Envelope Consultant or a separate entity.
  - Changes to the envelope work must be approved by the Building Envelope Consultant and submitted to the building department and to the Qualified Building Envelope Inspector and documented in the building enclosure design documents.
  - Window testing is required if the windows and adjacent cladding are altered in the rehabilitation construction work.
  - The Qualified Building Envelope Inspector must submit to the building department a certification letter at the completion of the work stating that the repair work was completed in compliance with the building enclosure design documents and any revisions that were made.

## Existing Condominium Buildings

Our understanding of Washington State Law - Chapter 64.34 RCW - Condominium Act now incorporates Chapter 64.55 RCW Construction defect disputes - multiunit residential building, the tasks outlined below appear to be required to comply with this law and specifically Chapter 64.55 RCW (previously known as Engrossed House Bill (EHB) 1848). We recommend that you consult legal counsel to assure that all legal requirements are being met with respect to the law.

1. For existing condominiums, building enclosure design documents signed and sealed by a Licensed Architect or Licensed Engineer (Building Envelope Consultant) are required to obtain a building permit in most municipalities if the cost of the work exceeds a specified cost or percentage of cost vs. value of the building, or if the work is viewed as more than normal maintenance.
2. According to Section .005 of Chapter 64.55 RCW (Section 1 of Title 64 RCW), the act applies to any multiunit residential building for which a permit for construction or rehabilitative construction of such building was issued on or after August 1, 2005. As such, the following applies to rehabilitative construction of an existing condominium.
3. It appears that a scope of work for rehabilitative construction or building envelope repairs must be developed from which a repair cost estimate is prepared.
4. If the estimated cost of the envelope work is less than 5 percent of the assessed value of the building(s), the work is not considered rehabilitative construction (requirement of the municipality for a building permit may still apply), however you are required to:
  - Submit, with the application for a building permit, a letter to the building department stating that the building envelope repair costs are less than 5 percent of the assessed value of the building(s).
5. If the estimated cost of the envelope work exceeds 5 percent of the assessed value of the building(s), the work is considered rehabilitative construction, and the following is required:
  - A certification letter, signed and sealed by the Building Envelope Consultant, is required with the submittal of the building enclosure design documents for a building permit that states essentially, "The scope of work is appropriate to satisfy the requirements of Sections .005 through .090 of Chapter 64.55 RCW."
  - The rehabilitative construction work must be inspected by a Qualified Building Envelope Inspector who can be the Building Envelope Consultant or a separate entity.
  - Changes to the envelope work must be approved by the Building Envelope Consultant and submitted to the building department and to the Qualified Building Envelope Inspector and documented in the building enclosure design documents.
  - Window testing is required if the windows and adjacent cladding are altered in the rehabilitative construction work.
  - The Qualified Building Envelope Inspector must submit to the building department a certification letter at the completion of the work stating that the repair work was completed in compliance with the building enclosure design documents and any revisions that were made.

### □13 EXAMPLES

## Existing Apartment Buildings

Our understanding of Washington State Law - Chapter 64.34 RCW - Condominium Act now incorporates Chapter 64.55 RCW Construction defect disputes - multiunit residential building, the tasks outlined below appear to be required to comply with this law and specifically Chapter 64.55 RCW (previously known as Engrossed House Bill (EHB) 1848). We recommend that you consult legal counsel to assure that all legal requirements are being met with respect to the law.

1. For existing apartments, building enclosure design documents signed and sealed by a Licensed Architect or Licensed Engineer (Building Envelope Consultant) are required to obtain a building permit in most municipalities if the cost of the work exceeds a specified cost or percentage of cost vs. value of the building, or if the work is viewed as more than normal maintenance.
2. According to Section .005 of Chapter 64.55 RCW (Section 1 of EHB 1848), the act applies to any multiunit residential building for which a permit for construction or rehabilitative construction of such building was issued on or after August 1, 2005. As such, the following applies to rehabilitative construction of an existing apartment **only if a "sale prohibition covenant" will not be filed with the county in which the building is located.** If a sale prohibition covenant is filed, it is our understanding that Chapter 64.55 RCW (EHB 1848) does not apply.
3. If a sale prohibition covenant will not be filed, it appears that a scope of work for rehabilitative construction or building envelope repairs must be developed from which a repair cost estimate is prepared.
4. If the estimated cost of the envelope work is less than 5 percent of the assessed value of the building(s), the work is not considered rehabilitative construction (requirement of the municipality for a building permit may still apply), however you are required to:
  - Submit a letter to the building department stating that the building envelope repair costs are less than 5 percent of the assessed value of the building(s).
5. If the estimated cost of the envelope work exceeds 5 percent of the assessed value of the building(s), the work is considered rehabilitative construction, and the follow is required:
  - A certification letter, signed and sealed by the Building Envelope Consultant, is required with the submittal of the building enclosure design documents for a building permit that states essentially, "The scope of work is appropriate to satisfy the requirements of Sections .005 through .090 of Chapter 64.55 RCW."
  - The rehabilitative construction work must be inspected by a Qualified Building Envelope Inspector who can be the Building Envelope Consultant or a separate entity.
  - Changes to the envelope work must be approved by the Building Envelope Consultant and submitted to the building department and to the Qualified Building Envelope Inspector and documented in the building enclosure design documents.
  - Window testing is required if the windows and adjacent cladding are altered in the rehabilitative construction work.
  - The Qualified Building Envelope Inspector must submit to the building department a certification letter at the completion of the work stating that the repair work was completed in compliance with the building enclosure design documents and any revisions that were made.

Please note, it would appear that after the completion of Item 5, that the building(s) could be sold as a condominium, however based on our reading of Chapter 64.55 RCW (EHB 1848) it could be interpreted that an intrusive investigation would need to be performed and a report issued by a Building Envelope Consultant after the rehabilitative construction is completed to fulfill the requirements of converting an apartment building to a condominium building.

### □13 EXAMPLES

## **BUILDING ENVELOPE INSPECTORS**

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This section of SeaBEC's web site was developed to help navigate the requirements Chapter 64.55 RCW (EHB 1848) and was not developed to qualify, certify, or exclude any persons or firms from performing building envelope inspections under the requirements of Chapter 64.55 RCW (EHB 1848). The direction that was taken by the committee was to help educate and inform the persons that would be hiring a Building Envelope Inspector. This section was not developed to educate or train a Building Envelope Inspector. At this time there is no entity that certifies, trains, or licenses Building Envelope Inspectors as referenced in Chapter 64.55 RCW (EHB 1848), and Chapter 64.55 RCW (EHB 1848) makes no provisions for this to the extent that it only requires a "qualified" person. While a training program or certification may be offered by some type of educational, industry, or trade based group in the future, there is no requirement in Chapter 64.55 RCW (EHB 1848) that a "certified" building envelope inspector is required.

**Qualified individuals generally fall into one of the categories below. Qualified inspectors must comply with Section 5 of EHB 1848:**

- Architect/Engineer – degreed, licensed by the state
- Design Professional – may be an engineer or architect in another state, does not have to be degreed or licensed in Washington. Limitation – subject to height and square footage restrictions.
- Tradesperson – Trained and experienced in building envelope systems
- Contractor (not otherwise engaged to the project) – may or may not have design capabilities. Staff should be trained and experienced in construction and/or repairs of building envelope systems.
- Specialty Inspection Firms – Staff should be qualified and experienced in building envelope systems.

Note: Check references and qualifications. For architects/engineers and contractors, check with the state for complaints, current registration, etc.

### **INTERVIEW QUESTIONS FOR POTENTIAL:**

[□19 BUILDING DESIGNERS](#)

[□20 BUILDING ENVELOPE INSPECTORS](#)

[□21 BUILDING CONTRACTORS](#)

## **APPLICABLE INFORMATIONAL/EDUCATIONAL RESOURCES**

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The following are web sites, programs that are offered through various trade groups, educational facilities, and professional associations. This listing is not meant to be all inclusive.

### **1. Existing Programs that Offer Completion Certificates or Other Certifications:**

#### **A. For Exterior Wall Cladding, Fenestration, and Related Flashings:**

- Northwest Wall and Ceiling Bureau's Courses for EIFS and EIFS Repair
- Northwest Wall and Ceiling Bureau's Courses for Cement Plaster (Stucco)
- Brick Institute of America
- Portland Cement Association
- Sealant, Waterproofing, and Restoration Institute
- AAMA Related Programs (?)
- Restore
- Vinyl Siding Institute

#### **B. For Roofing and Roof-Related Flashings:**

- Roof Consultants Institute (RCI):
  - Registered Roof Observer (RRO) program
  - Registered Roof Consultant (RRC) program
- National Roofing Contractors Association
  - Roofing Industry Educational Institute Certificate Programs:
    - A. Basic Roofing Technology
    - B. Advanced Roofing Technology
    - C. Building-up Roofing
    - D. Modified Bitumen Roofing
    - E. Single-Ply Roofing
    - F. Steep Roofing Technology
    - G. Metal Roofing System Technology
    - H. Roof Repair and Maintenance
    - I. Roof Asset Management
    - J. Protected Membrane Roofing
- Western States Roofing Contractors Association
  - Various Seminars Related to Roofing and Waterproofing
- Midwest Roofing Contractors Association
  - Certification Course for Roofing Torch Application and Safety (CERTA)
- Sheet Metal and Air Conditioning Contractors National Association (SMACNA)

#### **C. For Waterproofing (Above- and Below-Grade) and Related Flashings:**

- National Roofing Contractors Association's Course Offered by RIEI
  - A. Waterproofing Technology
- Waterproofing Consultants Institute
  - A. Waterproofing Technology Course

- University of Wisconsin's College of Engineering
  - A. Waterproofing Technology Course

**2. Continuing Education Classes, Symposiums, and Conferences:**

- A. American Society for Testing and Materials Symposiums
- B. Oak Ridge National Laboratory's Symposiums
- C. National Roofing Contractors Association Symposiums and Seminars
- D. Roofing Consultants Institute Symposiums, and Classes
- E. Restore Seminars
- F. Western States Roofing Contractors Association Seminars
- G. Midwest Roofing Contractors Association Seminars
- H. Roofing Contractors Association of Washington occasionally offers some training
- I. Northwest Wall and Ceiling Bureau

**3. Established Building Envelope Firms' In-House Training Programs:**

- A. Firms could provide documentation of in-house training programs

**RESOURCES**

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<b>Whole Building Design Guide</b>	<a href="http://www.wbdg.org/design/envelope.php">www.wbdg.org/design/envelope.php</a>
<b>National Institute of Building Science</b>	<a href="http://www.nibs.org">www.nibs.org</a>
<b>Oak Ridge National Laboratory</b>	<a href="http://www.ornl.gov">www.ornl.gov</a>
<b>National Climatic Data Center</b>	<a href="http://www.ncdc.noaa.gov/oa/ncdc.html">www.ncdc.noaa.gov/oa/ncdc.html</a>
<b>Western U.S. Climate Historical Summaries</b>	<a href="http://www.wrcc.dri.edu/climsum.html">www.wrcc.dri.edu/climsum.html</a>
<b>Washington Association of Building Officials</b>	<a href="http://www.wabo.org">www.wabo.org</a>

## QUESTIONS FOR POTENTIAL BUILDING ENVELOPE INSPECTORS

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1. Do you specialize in a particular type of construction (stucco, roofing, etc.) or scale (multifamily, single family, high rise, etc.) ?
2. What size projects have you worked on? (i.e. 3-5 stories, 6-17 stories, 18-36 stories)
3. How do you stay current with materials and waterproofing philosophy?
4. What level of professional liability insurance will you provide?
5. What type of field testing do you recommend for windows and doors? How many?
6. What type of project documentation do you use and does it include photographs? How do you track non-conforming items?
7. How do you staff and manage your workload and availability to address site issues and pre-installation meetings?
8. Will you produce a compliance letter that is acceptable to the Building Inspector at the completion of the project? Please provide a sample.
9. If the inspector is an architect, engineer, or contractor, are applicable licenses and registrations current? Can they provide verification? Do you have certification in certain areas of construction inspection?
10. Are there any complaints on file regarding your firm or services?
11. Are you familiar with the building design? The specifications and details?
12. Do you have any experience with members of the design and/or construction team?
13. How would you deal with perceived design defects?
14. Will you participate in design assistance if requested for the benefit of the project?
15. Who will be providing the inspections? If not you, please provide qualifications of specific staff members that will be assigned to the project.
16. What classes, training, or other instruction have you (or your staff) attended that qualify you as a building envelope inspector?
17. Are you able to provide field testing of windows and their installation?
18. Are you qualified to provide periodic inspection during construction versus condition survey of completed/existing systems?

## QUESTIONS FOR A POTENTIAL BUILDING DESIGNER

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- 1 What are your areas of specialization and/or interest?
- 2 What size/scale projects have you worked on? (i.e. 3-5 stories, 6-17 stories, 18-36 stories; multifamily, single family, high rise, etc.)
- 3 How do you stay current with materials and waterproofing philosophy?
- 4 What states have you worked in? Where are you licensed?
- 5 What level of professional liability insurance will you provide?
- 6 What type of field testing do you recommend for windows and doors? How many?
- 7 How often do you suggest construction administration site visits to comply with RCW 64.55 (EHB 1848)?
- 8 What type of project documentation do you use and does it include photographs?
- 9 How do you track non-conforming items?
- 10 If you are also retained as the Building Envelope Inspector, will you produce a compliance letter that is acceptable to the local Building Department and any other AHJ's at the completion of the project? Please provide a sample. If you do not provide inspections, who would you recommend provide the inspections?
- 11 Are your licenses and registrations current? Please provide verification.
- 12 Are there any complaints on file with the state?
- 13 How do you staff and manage your workload and availability to address site issues and pre-installation meetings?
- 14 Will you take responsibility and insure that the design documents and the details provided comply with RCW 64.55 (EHB 1848) and meet building code requirements?

## QUESTIONS FOR POTENTIAL BUILDING CONTRACTORS

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- 1 Do you specialize in a particular type of construction (stucco, roofing, etc.) or scale (multifamily, single family, high rise, etc.)?
- 2 What size projects have you worked on? (i.e. 3-5 stories, 6-17 stories, 18-36 stories)
- 3 How do you stay current with materials and waterproofing philosophy?
- 4 What level of liability insurance do you carry? Have you been involved in wrap insurance? What are your policy's exclusions? Can you provide a copy of your policy and your loss history?
- 5 What type of field testing do you recommend for windows and doors? How many?
- 6 What type of project documentation do you use and does it include photographs? How do you track non-conforming items?
- 7 How do you staff and manage your workload and availability to address site issues?
- 8 Are your contractor's registration, insurance, and bond current? Can you provide verification? Can you provide a performance bond in 1-½ times the amount of the project construction costs?
- 9 Are there any complaints on file with the state, better business bureau, etc.? Are you involved in any litigation on construction projects?
- 10 Are you familiar with the building design? Are you familiar with the specifications and details, especially as related to the building envelope?
- 11 How do you deal with missing or incomplete details?
- 12 Who will be providing on site supervision of the construction? If not you, provide qualifications of specific staff members that will be assigned to the project.
- 13 Are you aware that you need specific building envelope inspections and a letter of certification to the local building department certifying the building enclosure was constructed in substantial compliance with the building enclosure design documents is required prior to final approval of the project?
- 14 How do you incorporate inspector visits into your schedule?
- 15 How do you plan to provide access for workers and inspectors to the vertical building surfaces?
- 16 How do you deal with inspector non-compliance items regarding RCW 64.55 (EHB 1848) on behalf of your firm or your subcontractors? Do you ask for design changes?

**WINDOW TESTING THIS SECTION OF THE WEB SITE IS STILL BEING DEVELOPED**

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*Thoughts, direction, discussion*

3.6 FIELD QUALITY CONTROL

- A. Contractor Field Tests for Water Leakage with Static Air Pressure Difference: ASTM E 1105 at a uniform static air pressure difference of **[insert number]** psf; no water penetration.
- B. Conduct field performance tests for water penetration by an AAMA Accredited Laboratory or other qualified laboratory.

Installations include glazed aluminum curtain wall, window wall, aluminum windows, plastic windows, entrances and storefront.

- C. As installation progresses, conduct field tests on one designated completed **[insert installation name]** assembly randomly selected by Architect as soon as is practical after installation has started. Test early during installation so that errors in fabrication or installation can be found and corrections made before remainder of **[insert installation name]** assemblies are installed.
- D. After initial testing of earliest installations, test one randomly selected installation from next subsequent ten installations.
- E. If any installation fails performance tests, correct observed deficiencies in and re-test at Contractor's own expense. Incorporate corrective measures into all final **[insert installation name]** assembly installations.
- F. If the randomly selected installation fails performance tests, all other previous untested installations up to time of the testing will also be tested at Contractor's expense. If these installation also fail performance tests, correct observed deficiencies and re-test at Contractor's expense.

***Number of windows***

***Types of windows***

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Seattle Building Envelope Council

Task Force on Washington State Law - Title 64 - Chapter 64.55 RCW Construction defect disputes - multiunit residential buildings

Core Members

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