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# Unmasking the Layers: A Journey Through a Masonry Reclad Litigation Case Study

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This paper was presented at the 2024 IIBEC International Convention and Trade Show.

IN LATE 2016, there were initial owner reports of water infiltration and facade distress at a five-story mixed retail-office facility at a highly visible public plaza area, referred to herein as "the building." The owner initially hired a contractor to perform waterproofing repairs at the manufactured stone facade of the building. While performing these repairs, the contractor raised concerns to the owner regarding several stone units that appeared to be in a loose or unsound condition. Furthermore, the contractor reported one stone that had fully dislodged and landed on a canopy surface prior to the contractor starting repairs.

In January 2017, the owner engaged Walter P Moore & Associates Inc. (Walter P Moore) to perform an immediate initial visual assessment of the building's stone facade. Given the relatively recent construction timeline of the building, the owner also engaged Munsch Hardt law firm for its construction-law expertise, particularly in relation to potential construction and design defect matters. After completion of the initial site review work, Walter P Moore

identified 15 stone units that appeared to be laterally displaced, thereby presenting potential falling-debris life-safety hazards. Following further evaluation and tactile push tests, it was confirmed that all 15 stone units were partially to fully dislodged, with four of them posing an immediate fall hazard risk (**Fig. 1**). Emergency stabilization measures were implemented, and it was recommended to the owner to proceed with a comprehensive assessment of the stone facade to determine the extent of distress and causative factors.

In October 2017, Walter P Moore performed a phase 2 assessment focusing on the northwest and southwest corners of the building due to the extent of visible masonry distress observable from the ground at these areas (**Fig. 2**). This comprehensive evaluation included the removal and documentation of dislodged stone units, examination of mortar joint conditions, and assessment of masonry veneer anchor assemblies. The findings emphasized the need for further evaluation of the remaining stone facade areas of the building to identify other potential areas of concern and associated causative factors contributing to these masonry distress conditions.

Following phase 2, phase 3 investigations were conducted, covering additional areas of the facade not previously reviewed. An emergency assessment was initially performed to mitigate potential life-safety risks due to loose stones based on the preliminary ground-level survey. The scope then expanded to include loose-stone removal and exploratory opening assessments of the existing conditions of the masonry cavity and backup conditions at select locations. The

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**Figure 1.** Dislodged stone observed as part of the initial investigation reports.

phase 3 assessment revealed extensive mortar cracking (**Fig. 3**) as well as multiple as-built construction deficiencies, such as improper and excessively spaced masonry anchors; discontinuities in the air-water barrier, including at window transitions; inadequate support of fenestration assemblies; and, most critically, numerous additional dislodged stone elements.

These investigations progressively identified significant distress in the stone facade of the building, leading to safety concerns and a recommendation for comprehensive remediation measures, which required immediate measures to mitigate overhead hazards and led to the recommendation of a full reskin of the stone facade as the appropriate remediation measure.

### TIME IS OF THE ESSENCE

Across most jurisdictions in the United States, time is an issue from a legal perspective. This is because there are limits on how long a party has to file suit or arbitration to recover damages; these limitation periods can include periods for claims agreed by contract, statutes of limitations, statutes of repose, and other statutory and contractual limitations on when or if the plaintiff party's construction or design defect claims can be asserted.

This timing comes into play with investigation, inspection, and claim notices, and for getting claims on file (both in court and in arbitration). Accordingly, once defects sufficient to warrant significant repair and expense were encountered, it was important to get notices of defect claims out to the general contractor and architect in order to satisfy notice requirements. It was also essential to file suit within the statute of limitations (usually two years from time of owner knowledge for tort claims and two years from breach for contract claims) and/or the applicable time for a statute of repose (which varies from state to state). For this case, since there was some time left before those periods of time would elapse, it was decided to commence with repairs before filing suit. This was in order to mitigate damages and life-safety hazards, and strategically establish the reasonable cost of repair. Accordingly, it was decided to assemble a team to perform investigation for defects during demolition and repair, document defects and resulting damage, design the recladding/repair work, perform demolition/reconstruction, and perform project management (for the owner).

### ASSEMBLING THE TEAM

Because of Walter P Moore's familiarity with the building and the initially discovered defects, and its overall qualifications for forensic evaluation, design, and construction, Walter P



Figure 2. Loose stone observed as part of the initial investigation reports.



Figure 3. Extensive mortar cracking as observed in the Phase 3 investigations.

Moore was chosen as the engineer and building enclosure consultant (as well as lead design professional). In turn, Walter P Moore retained a qualified subconsultant architect to handle architectural issues. Once a repair design was prepared based on the findings of the initial investigations, the project was let to bid with qualified contractors and one general contractor was carefully chosen on the basis of experience, subcontractor team members, detail orientation evident in the bid, construction schedule, and price (in combination). Lastly, the owner enlisted the services of an adept and experienced construction management company to assume

responsibility for the seamless orchestration of the project's execution. This step served as the final layer of assurance that the project would be executed with the precision, efficiency, and professionalism it demanded.

# CONTRACTUAL RESPONSIBILITIES OF PARTIES

A legal review of the original construction and design documents, contracts, project files, and insurance declaration sheets helped us in setting up the case by providing the addresses, contact information, and identities of the general contractor, architect insurers, and insurance

brokers involved during original construction of the building. The original contract documents for construction, design, and construction administration provided contractual notice requirements, forum requirements (trial or arbitration), choice of law (Texas law), applicable standards of care for the general contractor and architect, and insurance policy coverage amounts.

The design documents provided design details, building code, industry standards, and material requirements. Collectively, this information was used to put all parties, brokers, and insurers on notice; evaluate design and construction defects; determine applicable law and forums for resolution; and carefully draft our pleadings.

Walter P Moore and Munsch Hardt reviewed the subcontractors' contracts to determine their scope of work. It was critical to understand which component belonged to which subcontractor at interfaces in the building enclosure assembly, such as rough opening flashings, and which parties should be put on notice of claims, be given the opportunity to inspect, and be added as defendants. Each of the subcontractors had a responsibility to perform their respective scopes of work in accordance with the contract documents, building code, manufacturer's instructions, and industry consensus standards.

Walter P Moore and Munsch Hardt then reviewed the general contractor's contract, which includes the umbrella responsibility to supervise and coordinate the interfacing scopes of work between the different subcontractor trades as well as between the subcontractors and the design team, and to ensure one trade hands off an acceptable substrate to the next trade. Ultimately, the general contractor is contractually responsible to the owner for construction of a building that is code compliant and in accordance with the requirements of the construction documents.

#### **INSURANCE OF PARTIES**

For plaintiff-side work on cases such as this matter, good construction attorneys intentionally craft their pleadings to create insurance coverage purposely and carefully, rather than destroy it. To do this, it is important for the attorney to understand construction insurance and construction insurance coverage law in their state, as well as typical exclusions to coverage. This may sound strange, but it is also important for a good plaintiff's attorney to help general contractor attorneys identify the correct subcontractors to bring into a case and to provide them proper notice of the general contractor's claim; critically, it is paramount for them to craft pleadings



Figure 4. Example of photo documentation of masonry condition pre-masonry demolition.

properly in order to create insurance coverage among downstream parties.

If possible, this is always preferable over putting parties at risk of going out of business (without insurance coverage). Insurance coverage protects downstream defendant parties, can provide the primary "well" from which to draw your damages, and is an option preferred by most downstream parties over insolvency (and by the owner if insolvency could lead to bankruptcy and getting in line behind banks and other creditors at bankruptcy). In this case, great care was taken to plead "into coverage," and also to make sure nothing was put into expert reports that could erode coverage. Often, for both pleadings and reports, it simply comes down to choosing the right words and avoiding the wrong ones. An experienced construction attorney should know this, and in this case, we employed this know-how to good effect.

# DISCOVERY PROCESS AND EVIDENCE GATHERING

As previously discussed, the initial investigation phases included visual observations, a limited arm's-length survey via aerial lift and suspended scaffold access, borescope, and exploratory openings. The initial investigations were essential to understand the underlying cause of observed masonry veneer dislodgement and the extent of associated deficient as-built conditions in the building's enclosure. During the masonry recladding phase, the exterior wall system was reviewed utilizing the following phasing scheme: pre-masonry demolition, post-masonry demolition, and post-sheathing demolition (**Fig. 4** to **6**). This allowed for thorough documentation of

each layer of the masonry wall system: masonry facade, air/water barrier over sheathing, and cold-formed metal stud wall. Construction defects were observed in each layer of the masonry wall system; however, the cold-formed metal framing backup wall system will not be discussed in detail within this article for brevity.

During the recladding phase, communication and coordination among the owner, building management representatives, Walter P Moore, and the general contractor ensured that deficiencies were identified and documented accordingly and in a timely manner. The contractor issued detailed two-week look-ahead schedules that categorized the building into areas to be demolished and reclad during a given time frame, which were critical as the building primarily remained occupied during construction. The subcontractor performed demolition work that would then be reviewed and documented by Walter P Moore and other representative defendant and third parties with a reasonable time frame being allocated before ensuing repairs and recladding were started.

The documentation process of the masonry veneer pre-demolition focused on deficiencies in the masonry veneer. The typical deficiencies included cracked mortar joints, loose masonry stone units, and deficient movement joint sizes. The documentation of the air/water barrier over sheathing post-masonry demolition focused on the deficiencies within the cavity wall system. The typical deficiencies included penetrations and discontinuities in the air/water barrier, unadhered through-wall flashing components, and inadequate spacing and improper fastening of masonry veneer anchors. Our documentation

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Figure 5. Example of photo documentation of masonry cavity wall post-masonry demolition.



**Figure 6.** Example of photo documentation of backup wall post-sheathing demolition.

process consisted of developing a series of task item notations for expected representative construction deficiencies, field sheets, photographs, and a deficiency tracking log. The task items were developed based on deficient conditions observed during previous initial investigation phases of the project and categorized as pre-masonry demolition and post-masonry demolition. New deficient conditions were added to the task item list throughout

the investigation based on engineering judgment and experience, compliance with industry standards, and the frequency in which the deficiencies appeared.

The task item deficiencies were documented on the elevation field sheets, with their corresponding location, photo, and quantity. The deficiency tracking log allowed Walter P Moore to determine the extent of the deficient conditions and whether these conditions were

global or isolated. Furthermore, thorough documentation during the recladding phase of the project was essential for the litigation process, as they were used as supporting documents and evidence for the owner's claims.

In summary, the defects identified in the unit masonry veneer cladding throughout the project included the following:

- Inadequately sized horizontal masonry expansion joints that are noncompliant with industry standards and manufacturer's requirements
- Improper installation of masonry veneer anchors per manufacturer's installation instructions and the record construction documents
- Excessive spacing of masonry veneer anchors per building code requirements and the record construction documents
- Inadequate adhesion of mortar to masonry units, which are noncompliant with industry standards

The defects in the air/water barrier system included the following:

- Unsealed abandoned fastener penetrations at and around masonry veneer anchors
- Holes in the air/water barrier and/ or sheathing
- Improperly installed self-adhered flashing membrane, including wrinkles, fish mouthing, inadequate adhesion, and backing paper not removed
- Discontinuities in the air/water barrier at locations such as the roof-to-wall interface, fenestration assemblies, unit masonry veneer walls, balcony curbs, and inside canopies.
   Critically, a view of the lighting-illuminated interior building areas through the improperly installed and discontinuous fenestration flashing transitions was observable at multiple locations, indicating the building was not originally constructed in an airtight manner
- Inappropriate flashing materials installed at fenestration assemblies
- Discontinuities in the backup substrate at locations such as beneath punched openings, on top of parapet walls, and around canopies

### RECLAD DESIGN AND CONSTRUCTION

The project involved extensive facade repair work, including demolition and reconstruction and, very importantly to the owner, matching the existing original exterior wall aesthetic characteristics of the building. An architect was engaged by Walter P Moore to ensure that the architectural elements, including the masonry veneer, would maintain the same

aesthetic appearance as desired by the owner. This involved carefully matching the interior and exterior architectural elements to achieve consistency in appearance.

The selected general contractor commenced work in December 2018, with a scope that included demolition of the existing facade stone, veneer ties, and other architectural elements to allow for repairs and documentation of backup wall conditions. The reclad work involved various aspects such as flashing and sealing window perimeters, adding stone masonry veneer ties, constructing new stone masonry cladding, and installing flashing at key transition areas (Fig. 7 and 8).

Walter P Moore initially focused on the unit masonry veneer wall but later expanded the scope to include repairs to the existing air/water barrier, sheathing, and cold-formed metal framing wall due to later-revealed deficient conditions during demolition. Challenges included replacing the air/water barrier while keeping storefront windows in place, which required careful planning and additional flashing components to ensure airtightness.

Throughout the project, there was a proactive approach to addressing unforeseen conditions, and a strong working relationship with the general contractor helped in managing the project effectively. A construction manager was hired by the owner to oversee coordination, host regular town hall meetings with facility tenants, maintain and publish updated construction schedules, and coordinate weekend work as needed to keep the building operational and functional for tenants and patrons.

Testing played a significant role in quality assurance, including mortar testing, air- and water-leakage testing at windows and window perimeters, and field adhesion testing (**Fig. 9**). These measures ensured that the repairs met the required standards and specifications.

# ADDITIONAL LEGAL ANALYSIS AND COMMENTS

In some of the sections above, the Munsch Hardt team has, from a proper claim perspective, touched upon the importance of insurance, insurance coverage, and identification of notice requirements (in contracts and in statutes). We have also touched on topics such as artful pleading into coverage and careful word choice in both pleadings and expert reports. For brevity, we will highlight key topics, such as selection of proper experts, the key components of a good expert report, preparation of claims for trial or mediation, and recovery of damages.



Figure 7. Installation of new sheathing, air barrier, and brick ties during masonry reclad.

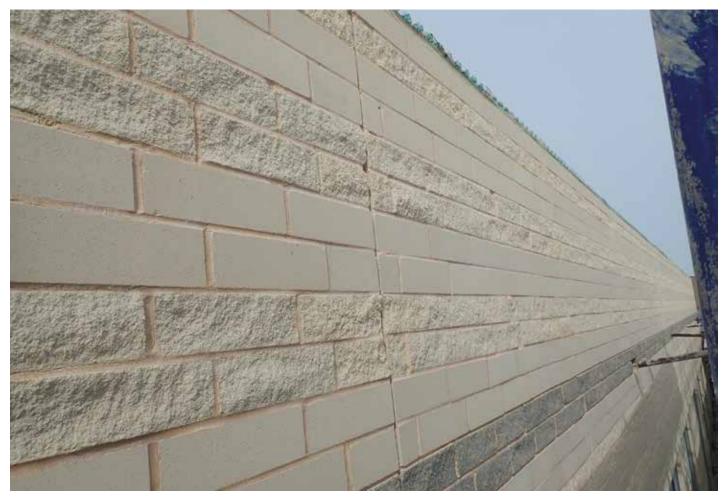
### Selection of Experts and Expert Reports

Selecting the appropriate contractors for demolition, repair, and remediation endeavors is an imperative undertaking. Of equal significance is the judicious selection of experts. In the field of law, the admission of expert opinions necessitates meticulous consideration. It is not merely a matter of ascertaining qualifications; rather, it demands an evaluation of the expert's experience, training, and educational background, particularly as they pertain to the

subject matter at hand. Equally critical is an assessment of the methodologies the expert employs and the reliability and credibility of their opinions. The overarching objective is to ensure that the expert's insights are of such caliber that they can effectively aid a trier of fact, including lay jurors, in comprehending and adjudicating upon matters that lie beyond their inherent understanding.

Formulating a robust expert report requires the careful integration of a multitude of critical components, each of which plays an

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**Figure 8.** Installation of new masonry units during the reclad construction work.



**Figure 9.** AAMA 501.2 nozzle water testing was performed at a punch window in order to evaluate potential water leakage.

indispensable role in the report's ultimate effectiveness and credibility. These essential elements are paramount in ensuring that the expert report not only aligns harmoniously with the case's legal underpinnings but also excels in its comprehensive consideration of salient facts, exhibits discerning thoughtfulness, and garners unwavering credibility.

- Thorough assessment of relevant facts: The report should encompass a meticulous examination of all pertinent factual information. Using comprehensive investigation and analysis techniques will ensure that no relevant aspect is overlooked, fortifying the foundation upon which expert opinions are formulated.
- Thoughtfulness and credibility: In its entirety, the report must exude thoughtfulness, reflecting a discerning and conscientious approach to the subject matter. This thoughtfulness, when coupled with demonstrable expertise, bolsters the report's credibility and fosters confidence in its assertions.
- Sufficiency of evidentiary basis: Every opinion proffered within the report must be anchored firmly on a substantial evidentiary basis. The credibility of these opinions hinges on the strength of the supporting evidence.
- Accessibility to laypersons: The report should be crafted with a view toward accessibility and ease of discernment to a lay audience. Avoiding technical jargon and using plain language facilitate comprehension by individuals who lack specialized expertise.
- Precision in terminology: The judicious use
  of precise terminology and the employment
  of the correct "magic" words are essential to
  prevent inadvertent repercussions, especially
  concerning insurance coverage matters. This
  ensures that the report remains legally sound.
- Incorporation of visual evidence: Each
  opinion articulated within the report should
  be closely tethered to demonstrable photographs, design specifications, building
  codes, and industry standards. This visual
  corroboration lends greater weight and clarity
  to the expert's assertions, particularly when
  presenting these findings to lay jurors.
- Alignment with industry norms:
   Expert opinions should seamlessly align with prevailing industry norms, design specifications, and statutory building codes.

   This alignment underscores the expert's adherence to recognized best practices.
- Persuasiveness: Ultimately, the overarching objective is to craft an expert

report that is supremely persuasive. Its contents should inspire unreserved confidence in both the selection of experts and the soundness of their opinions, leaving judges, jurors, and arbitrators nodding in quiet affirmation.

### Preparation of Claims for Trial/ Mediation

The meticulous preparation of legal claims for trial or mediation should be undertaken with unwavering commitment, irrespective of the ultimate dispute-resolution trajectory. It is essential to approach each case with the intent of thorough preparation, akin to the readiness required for a trial in a court of law. This strategic approach ensures not only the comprehensive presentation of one's case but also sends a signal to opposing counsel, akin to a seasoned equestrian discerning the confidence or trepidation of a rider, that the matter is being handled with the utmost seriousness.

Indeed, defense attorneys possess a discerning acumen that enables them to distinguish cases prepared solely for settlement or mediation from those meticulously prepared for trial. This discernment is parallel to the keen sense of a perceptive horse detecting the apprehension of an inexperienced rider. Conversely, when defense attorneys perceive that the plaintiff's counsel is resolutely prepared and likely to prevail in a trial, they are often more inclined to seek an amicable resolution. The rationale behind this inclination is rooted in the recognition that settling the matter becomes an advantageous course of action. Settling not only curtails the escalating costs associated with protracted legal battles but also provides a pragmatic avenue for dispute resolution.

In essence, the maxim to "prepare for trial to prepare for mediation" encapsulates a prudent approach in the realm of legal advocacy. By diligently laying the groundwork for trial, attorneys effectively fortify their position in mediation. This comprehensive preparation serves as an unequivocal demonstration of resolve and competence, thereby compelling opposing parties to engage earnestly in the mediation process. The net result is a heightened likelihood of reaching an expeditious and mutually agreeable resolution—a course of action that invariably benefits plaintiffs, often referred to as and synonymous with "owners," by curtailing the financial burden associated with prolonged legal proceedings, encompassing attorney and expert fees.

#### **Recovery of Damages**

The final phase in the legal process demands detailed consideration of recovery strategies. A pivotal element in enhancing the prospects of a favorable recovery hinges on the exhaustive preparation for trial. For both attorney and expert, a profound comprehension of the case's minutiae is imperative. This comprehension extends to the intricate details contained within original design documents and investigative findings, ensuring a comprehensive grasp of the case at hand. Moreover, the ability to adeptly illustrate each defect with photographs and articulate explanations is essential. These visual aids serve to expose the defects' inherent deficiencies and lend indisputable clarity to the argument.

In contemporary legal practice, the art of compelling presentations is often underutilized, but it remains an invaluable tool. Whether delivered by a proficient attorney or an expert, a well-constructed presentation possesses the capacity to wield significant influence. During mediation proceedings, it can wield sufficient persuasive power to convince insurers to authorize substantial settlements. In the context of trials, arbitrations, or hearings, it holds the potential to sway the opinions of jurors, judges, or arbitrators in favor of directing the defendant parties to issue substantial compensation.

The overarching goal is to secure comprehensive coverage for the costs associated with repair, remediation, and related expenses. However, it is crucial to bear in mind the fundamental tenets of recovery—that damages are only recoverable if they are deemed both necessary and reasonable. This necessitates the infusion of necessity and reasonability throughout the entire spectrum of design, construction, and expenditure. The synthesis of these principles is the linchpin to achieving a successful recovery.

In summation, the recipe for effective recovery in the legal arena is multifaceted. It necessitates a profound understanding of case details, comprehensive visual representation, and the persuasive power of presentations. The ultimate goal is to secure the requisite coverage for repair and remediation, all while adhering to the vital principles of necessity and reasonability. When executed judiciously, this approach culminates in achieving favorable outcomes that reflect both the rigor of preparation and the merits of the case.

#### CONCLUSION

This case serves as an illustrative and comprehensive example, encapsulating

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the intricate interplay of the multifaceted elements we have examined thus far. It stands as a testament to the profound impact that astute decision-making and meticulous preparation can exert within the legal landscape.

In this instance, the owner exercised discerning judgment in assembling a legal team distinguished by experience and expertise. Simultaneously, they enlisted the services of a forensic engineer and lead expert whose qualifications were beyond reproach. With precision, proper notice was extended to defendant parties, insurance brokers, and insurers, setting the stage for an encompassing legal strategy.

The artful crafting of pleadings not only delineated the contours of the case but strategically aimed at invoking insurance coverage. Expert reports, an integral component of the proceedings, were masterfully composed not only to reflect the essence of the pleadings but also to serve as compelling advocates for coverage while proffering dependable opinions in a manner that resonated with clarity and credibility. The abundant inclusion of illustrative visuals—serving as both exposition and elucidation—made these reports all the more persuasive.

The case's meticulous preparation for trial left no stone unturned, delving into the minutiae of details with a precision that compelled witnesses to concur with the assertions of design and construction defects. This unanimous consensus added a formidable layer of strength to the owner's position.

As a result, defense attorneys, acutely aware of the robustness of the case, returned to their insurance clients with a resounding message: "Write substantial checks at mediation." The confluence of factors, including the unequivocal establishment of reasonable and necessary repair costs through the work itself, prompted insurers to issue checks of sufficient magnitude to bring contentment to the owner's doorstep.

In closing, this case represents the embodiment of effective legal strategy and meticulous execution. It is a testament to the art of legal advocacy and a potent reminder that, in the end, even those whose construction or design/administration work might have faltered can find a path to redemption, while simultaneously ensuring their continued presence in the business world. With the right combination of expertise, strategy, and perseverance, "happily ever after" isn't just a fairy-tale ending, but a real-world outcome.

#### **ABOUT THE AUTHORS**



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