



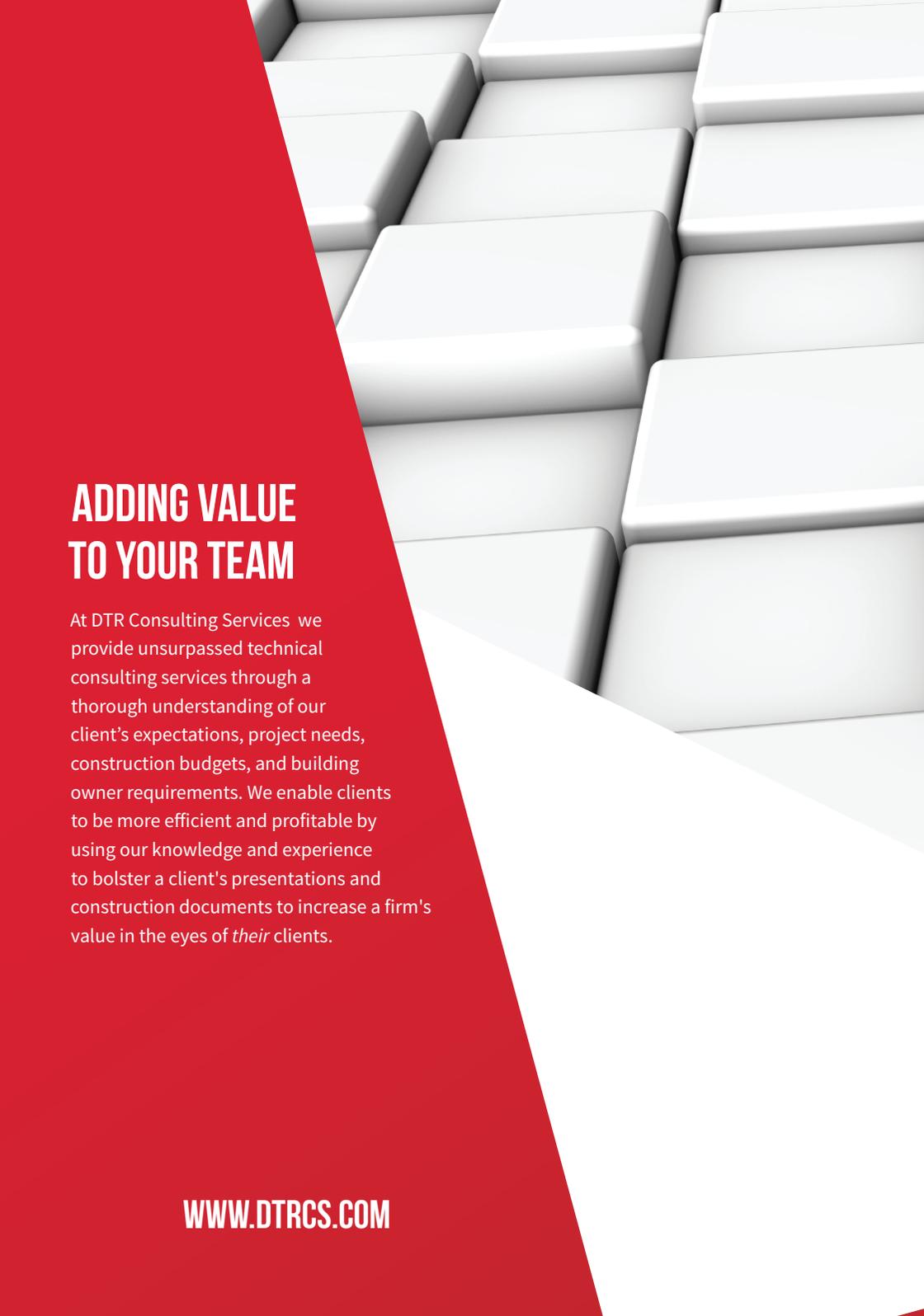
dtr

Consulting Services

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**BUILDING  
SCIENCE GUYS™**

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## ADDING VALUE TO YOUR TEAM

At DTR Consulting Services we provide unsurpassed technical consulting services through a thorough understanding of our client's expectations, project needs, construction budgets, and building owner requirements. We enable clients to be more efficient and profitable by using our knowledge and experience to bolster a client's presentations and construction documents to increase a firm's value in the eyes of *their* clients.

[WWW.DTRCS.COM](http://WWW.DTRCS.COM)



**BREATHABLE  
STRUCTURES  
WITHOUT WATER  
PENETRATION**

**PROTECT YOUR ASSETS**

## BUILDING ENVELOPE //SERVICES

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Design and performance evaluations of Building Envelope (exterior enclosure) including:

## 01 //FINISHES

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Dimensional stone, architectural pre-cast concrete, glass fiber reinforced concrete (GFRC), masonry, panelized systems.

## 02 //MATERIALS

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Glazing types (architectural performance requirements), deck traffic coatings, waterproofing systems and permeable walls (breathable).

## 03 //ROOFS & WALLS

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Green roofs (intensive, extensive and tray systems), traditional roofing systems, curtain walls (glass, metal, stone), glass roof and skylights, structural glass systems, exterior walls, doors and openings, below grade waterproofing.

# #1 CAUSE OF LITIGATION

Did you know roofs, skylights, glazed curtain walls, leaks, and flooring failures are the #1 cause of litigation for building professionals? Building Code changes, energy efficiency, and an increased push for sustainability are making a significant impact on the types of products we select and the order of operations.

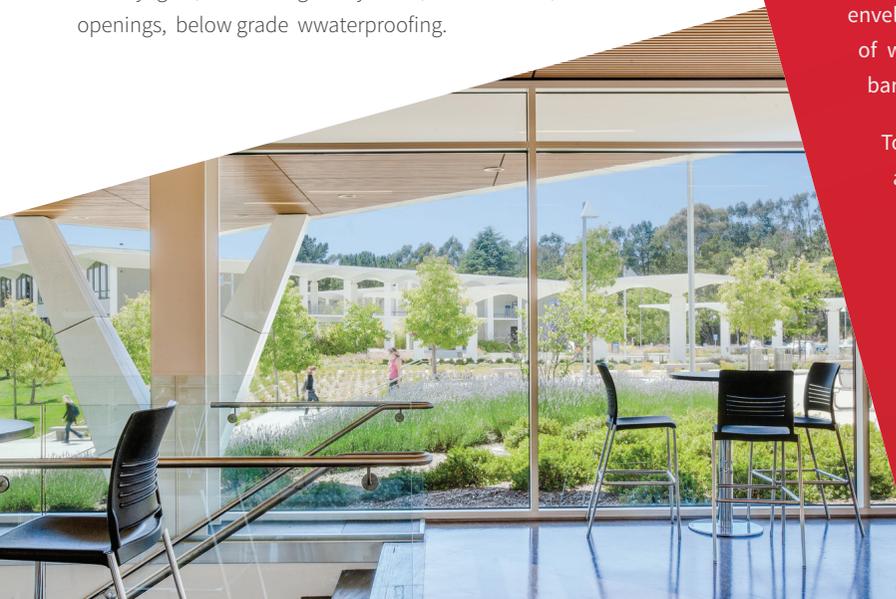
DTR Consulting Services collaborates with our clients to improve their efficiency and profitability. By using DTR's expertise to bolster your presentation, design constructability, and bid documents, we can increase your firm's revenue for clients *and* limit exposure to potential claims.



## AVOID CHANGE ORDER

Architecturally we want our building envelope to allow water to penetrate. The Building Envelope should be designed and constructed to prevent water within the wall and ceiling from creating a barrier behind the exterior cladding.

To protect the entire Building Envelope, DTR Consulting Services uses a holistic approach to design and construction. This includes glazing types, green roofs, and foundation (beneath slabs) to analyze the design and construction of the Building Envelope (exterior enclosure).



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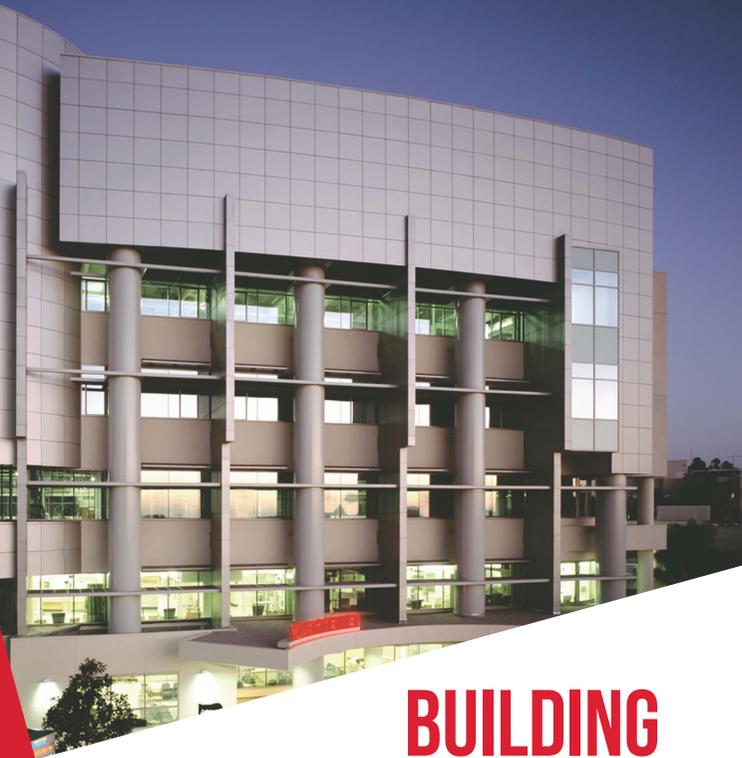
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## ORDERS

structures to breathe, but not allow  
ing Code requires that the exterior wall  
constructed to prevent the accumulation  
assembly by providing a water-resistive  
veneer.

Building Envelope, DTR takes an integrated  
and evaluation that includes exterior walls,  
roofs and traditional roofing systems, and the  
(slab). We use our expertise in Building Science  
n, performance, and protection of the Building  
(enclosure).



# BUILDING SCIENCE GUYS™

DTR is a consulting firm specializing in Building Science; an interdisciplinary field of study that includes the design evaluation or analysis of the whole building system, building physics (heat, air and moisture transfer) and overall sustainability through material selection, skilled detailing and proper construction.

Our firm philosophy is to provide our clients with unsurpassed technical consulting services. Based on a thorough understanding of a client's expectations, budget and building owner's requirements, our expertise adds value to your team. With DTR Consulting Services you can be assured we will exceed your expectations.

# REDEMIATION ARCHITECTURE //SERVICES



## SITE ANALYSIS

Analysis and documentation of actual site conditions, original contract, manufacturer's data and incident reports.



## FORENSIC INVESTIGATION

Complete investigation, destructive testing, analysis of proposed remediation. Building verification through specialized forensic analysis.



## RECONSTRUCTION

Bid documents with full set of drawings and specifications for Contractor selection and pre-qualification assistance.

## WATERPROOFING

Diagnosing leaks should always include inspection, testing and analysis of the leak location and the components or properties responsible for the issues. Once the problem is properly diagnosed, then a solution can be designed to stop the intrusion issues.

Utilizing DTR's building science expertise during the design and construction of a building can dramatically reduce the overall liabilities associated with water intrusion, toxic mold, and premature building deterioration.



## WATERPROOFING BELOW GRADE

Water may enter below grade through joints, walls, or floors. Various below grade waterproofing systems address these problems and are available at varying costs, effectiveness, and installation invasiveness.



## SICK BUILDING SYNDROME

Many buildings start leaking immediately after construction or within the first five years. Water intrusion is one of the main contributing factors to litigation, building damage, structural damage, rot, termites and microbial problems that can lead to sick building syndrome.





## **WATER LEAKS, THE PLAGUE THAT WON'T GO AWAY!**

Today many architectural firms employ talented designers who engage with the client during the design phases of the project. But clients not only want compelling design, they need a solid set of construction documents and an experienced team on the job site to oversee the contractor. Lack of attention during the design phase of a project can lead to water intrusion and harmful effects. Detailing of a building envelope cannot be removed through value engineering or be an afterthought. One mistake in a small detail can lead to significant problems.

**PROTECT YOUR ASSETS**



# DON'T WORK HARDER FOR MORE RISK

Today design firms and contractors work longer hours for less pay. They accept more liability just to remain in business. Stand out from the competition when you complement your team with DTR's credentials and experience. Take less risk and ensure client satisfaction with the Building Science Guys on your team.

Los Angeles | San Francisco | Sacramento | Phoenix  
toll free: 855-705-3600  
[www.dtrcs.com](http://www.dtrcs.com)