



Building Envelope Consulting  
Waterproofing Consulting  
Specification Writing Services  
Constructability/Peer Reviews  
Door Hardware Consulting  
Detention Design Assistance  
Material Selection Assistance  
ADA/Code Reviews  
Field Survey/Investigation  
Facility Building Standards  
CALGreen Documentation  
Construction Administration  
Conflict Resolution Services

*Call for  
more information  
855.705.3600*





When considering an Independent Consultant...

Select a firm with the Resources & Experience to best serve you...



- Largest Specification Writing Firm in Western US
- More than \$7.4 B in construction project experience
- Less than 1/2 of 1% Construction Change Order Rate
- Integrated Building Envelope/Waterproofing Consulting
- Product Material Selection Resource Firm

Centralized Technical Resource Solutions

Public Safety Centers  
Research Facilities  
Libraries  
Courthouses  
City Halls  
Hospitality  
Military Facilities  
Aquatic Centers  
Community Centers  
High Rise Buildings  
Water Pump Stations  
Wastewater Treatment Facility  
Laboratories  
Physical Sciences Center  
USPS Distribution Centers  
Universities/Colleges  
Healthcare Facilities  
Mixed-Use Structures  
Parking Garages  
Commercial Offices  
Hotels/ Resorts  
Private Education  
K-12 Education  
Cemeteries/ Mausoleums  
Sports Complexes  
Seismic Upgrades  
Civic Centers  
Surgical/Radiological Suites  
Correctional Facilities  
Medical Centers  
Fitness Centers  
Data Centers  
Science & Technology  
Transportation Facilities  
Museums  
Condominiums  
Wellness Centers  
Religious Facilities  
Industrial Facilities  
Outpatient Surgery Centers  
Large Retail Malls  
Medical Office Buildings  
Public Parks & Recreation  
Clubhouse Facilities

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Architectural & Engineering Technical Specifications | Building Envelope Consulting | Waterproofing Consulting

Constructability/Peer Reviews | | Door Hardware Consulting | Detention Door Hardware Consulting

Conflict Resolution Services | Construction Administration | Facility Standards

Experience you can count on

[www.dtrcs.com](http://www.dtrcs.com)

916.772.3600



## Prospective Client:

DTR provides our Clients with additional resources to ensure top quality construction documents, thoroughly coordinated with the project team. We provide our design technical resource services to assist your design team in product material selection, manufacturing and fabrication resources, peer reviews, waterproofing, construction techniques and procedures suitable to your particular project. DTR co-authors technical specification sections with structural, civil, landscape, mechanical and electrical disciplines as well as other consultants, while reviewing the entire project to limit potential shortfalls and double coverage of building components. One document, the Project Manual technically coordinated with your drawings, developed with clear, concise, complete and enforceable language, relevant to your specific project.

DTR Consulting Services is a unique technical consulting firm that merges a building envelope consultant, traditional specification writer, experienced project architect, specialty consultant and construction manager into a single source that elevates your project experience.

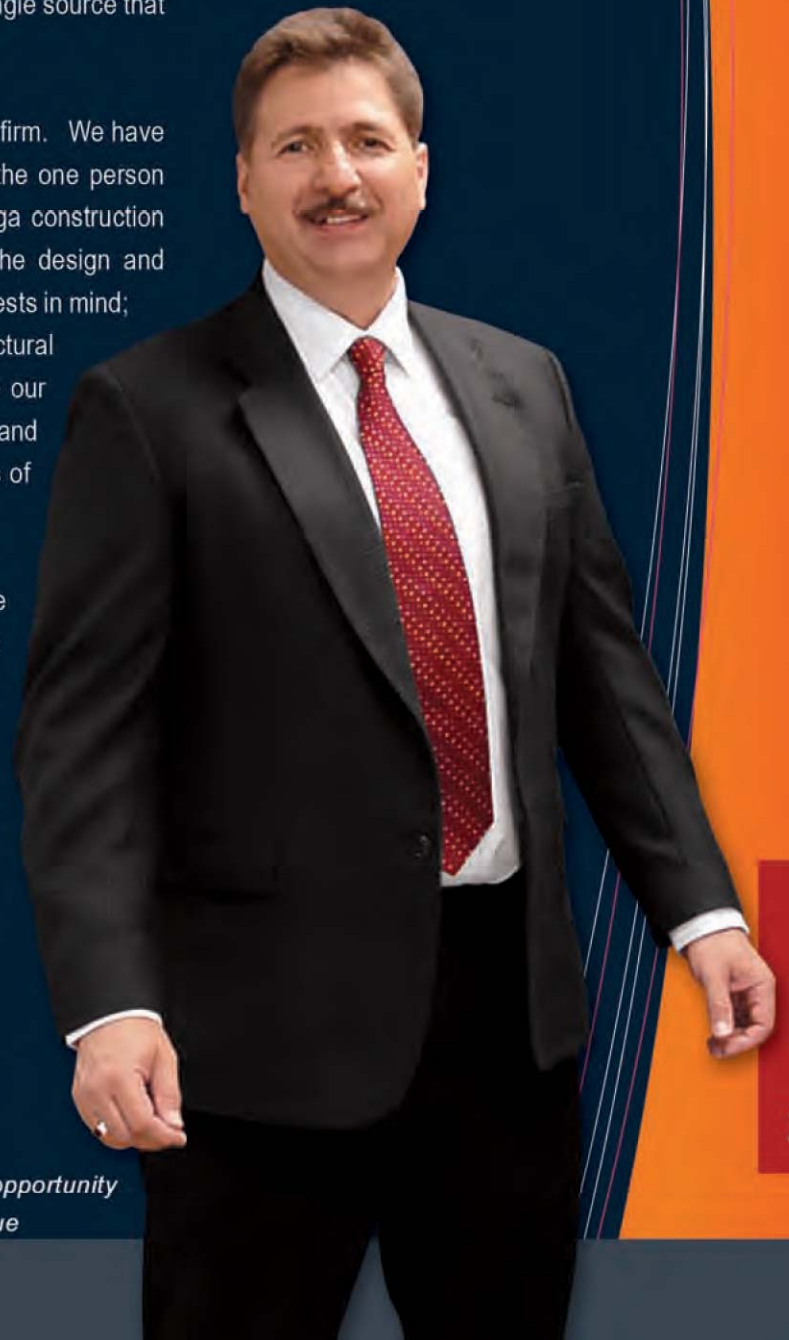
DTR Consulting Services approaches our work tailored to fit your firm. We have set out to create services unique from all others. We are not the one person independent spec writer who never visits your office or the mega construction management consultant hired by a project client to oversee the design and construction document process that does not have your best interests in mind; rather we are a firm founded to be a true extension of your architectural office. To borrow a line from our mission statement, we "Utilize our knowledge and experience to bolster our client's presentations and construction documents to increase their firm's value in the eyes of their clients and to limit all parties exposure to potential claims."

We provide our clients with an all-in-one design technical resource and are actively involved in your projects and visible in your office on a routine basis. Our marketing approach has always been to deliver the best full-service products to our clients knowing that when our clients are profitable and we contribute to our client's success... new jobs will follow. I look forward in presenting our firm process, philosophy and services to you in person.

*Thomas C. Berger, RCI, BEC, CSI, CDT, SCIP*  
Managing Principal

**dtr**  
Consulting Services

[www.dtrcs.com](http://www.dtrcs.com)



*"We want your business and I would love the opportunity to present our approach, experience and unique services to both you and your firm."*



## Mission Statement

To provide our clients with unsurpassed technical services through a thorough understanding of our client's expectations, project needs, deliverables, budgets and the owner's project requirements. Offer services in a manner to instill trust and to allow our clients to be more efficient and profitable.

Utilize our knowledge and experience to bolster our client's presentations and construction documents to increase their firm's value in the eyes of their clients and to limit all parties exposure to potential claims.

Promote in-house professional development for all staff and encourage ongoing educational activities, which support our Mission Statement

## Firm Philosophy

We recognize that, as a professional service firm, our employees are our greatest assets. Our firm is only as successful as the individual members of our team. Clients place their trust in our firm; however, they work with individuals and develop their opinions of DTR Consulting Services based on the people with whom they come in direct contact.

We are committed to retaining a highly competent staff of professionals and giving them the opportunity to continue to grow in capability and self-esteem. Our intent is to have each employee feel genuine pride in DTR Consulting Services, its quality work, its outstanding fellow workers, and above all, its intense dedication to serving our clients.

We believe in a management philosophy which encourages open communication throughout the firm and recognizes the importance of employee involvement in problem solving. We seek to minimize problems and prevent errors, to do each job right the first time. We strive to create an atmosphere of trust which, encourages open communication. We believe in providing all of our employees with positive encouragement, recognition, coaching, and mentoring. We believe in the concept of seeking continuous improvement in all that we do.

## Professional Services

Today, DTR works with both Architects and Engineers in producing 3-part technical specifications for commercial, institutional, retail, health care, public use, corrections and educational construction type projects, as well as assisting with quality control services. Unlike many 3rd party (independent) spec writers, I have spent the majority of my career in the A/E field and understand the importance of having a proactive consultant and the sensitivity of good design. We will work with your staff, consultants, construction managers, and others to coordinate all divisions of the technical sections and Division 01 General Requirements, including special LEED language for projects seeking certification. Our Project Manuals are comprehensive, complete with current industry standard references, enforceable and visually stand apart from our competition.

Our Quality Control services are tailored to work as an extension to your senior staff. Our "Redline Review" and "Complete Check" plan check services can be molded to help your senior staff fine tune your documents while allowing your Project Managers to interface with their clients. Our success starts with our philosophy to work with your project team, as a cohesive team, to refine your firm's construction documents, significantly reducing RFI's and potential change orders. Our reviews and reports are structured to minimize the time that valuable information gets to your project team.

**Call us to see how this review far surpasses other 3rd party Constructability Reviews...**



# Why Us

Whether you currently use in-house staff or the one person independent specification writer, our firm is far superior to these resources. Our firm is structured with multiple staff working on various elements of each project. DTR Consulting Services assigns at least two staff members to each project making sure that we meet your team's requirements and provide full coverage on each project. You do not get this with single person consultants. Our office houses a large open studio environment, which fosters a learning environment where all team members benefit from our open communications and collaboration. This communication is extended to the entire team. DTR coordinates the development of all specifications with the entire project team, keeping the Project Manager informed at every level, saving your staff precious time and expenses.

Eliminate senseless Constructability Review comments from Construction Managers by incorporating our Complete Check review. Our reviews are strictly confidential and are purely based on the construction documents. Reviews provide scanned images of our redline comments and easily read reports which, are sorted for each consultant via our database, indicating specific discipline coordination issues and/or required clarifications. Our Peer Reviews can be molded to help your senior staff fine tune your documents while allowing your Project Managers to interface with their clients. Our success starts with our philosophy to work with you and your project team, to refine your firm's documents, significantly reducing RFI's, substitution requests and potential change orders. Our reports are structured to minimize the time that valuable information gets to your project team

Also available are many other technical services that are simply not available from other independent consultants.





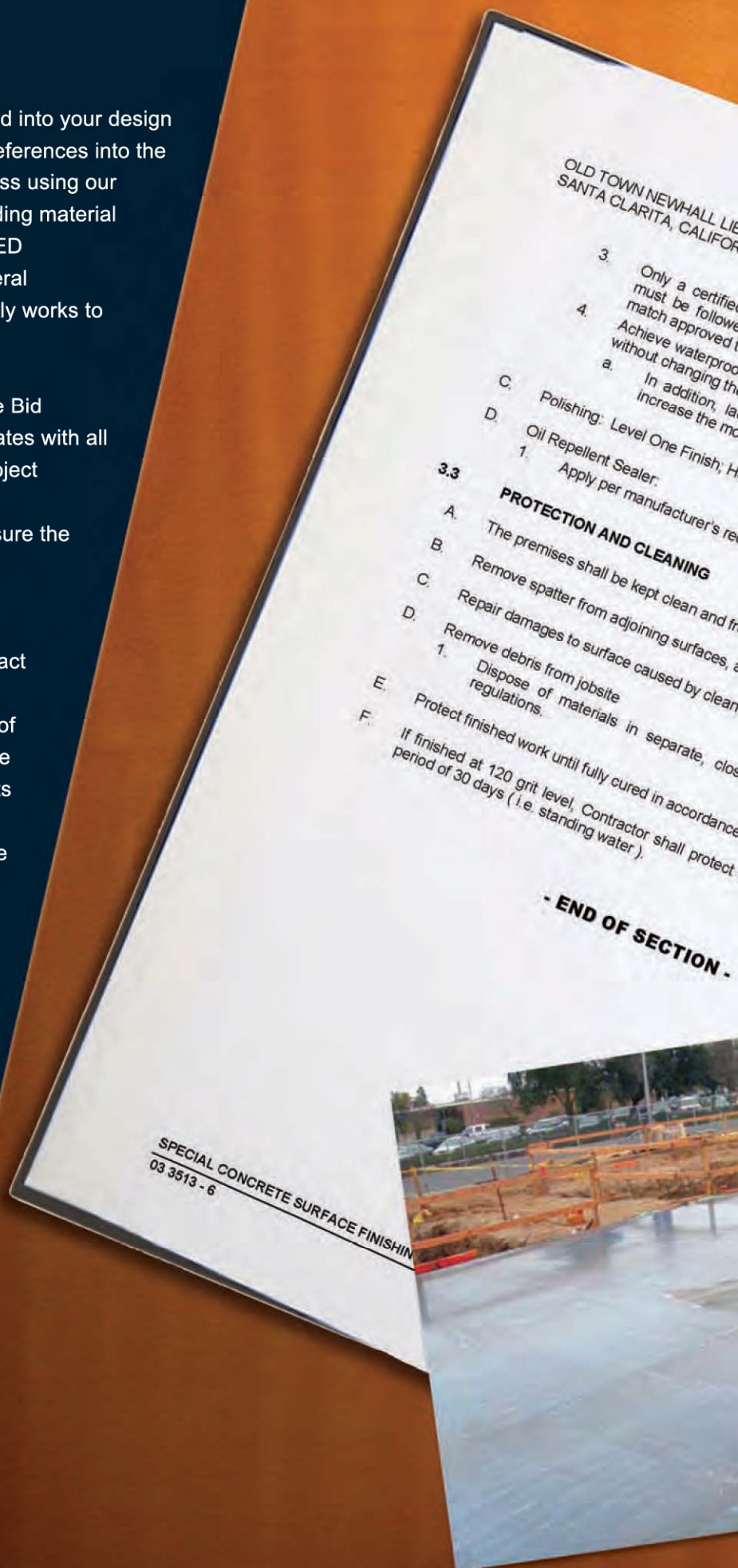
# Building Specifications

Using a clean new approach, our team is integrated into your design process documenting materials and installation preferences into the written specifications throughout the Design Process using our proprietary, systematic approach. Involved in building material selection and evaluation, drawing terminology, LEED requirements, code concerns and developing general requirements for each project, our team consistently works to save you time.

From Schematic Outline Specifications through the Bid Documents 3-Part Specifications, our firm coordinates with all team members to produce one comprehensive Project Manual, starting with an "easy to read format" to co-authoring sections with team consultants to ensure the project esthetics and project requirements are incorporated into your documents.

The Project Manual accounts for 50% of the Contract Documents. They are written to communicate with hundreds of people involved with the construction of the project to assure the implementation of both the intent of the designers and the project requirements needed to assure proper material installation. Specifications can be as complex to develop as the construction drawings and can range from a single printed volume to multiple volumes. In many respects, this work is similar to that of an attorney producing a contract.

Reduce the risks you face using old project specifications, canned manufacturer's specs or dated office masters. Enjoy the wealth of knowledge and technical resources that comes with our professional services. Our reference material and sources are continually updated along with the most thoroughly researched and professionally written specifications in the industry. Our work undergoes regular and extensive peer reviews. Let us help you increase your chances of success on your next project.





“

I developed my deep appreciation for good project specifications during the construction administration overseeing my first major construction project. As an integral part of the Construction Documents they empowered my ability to enforce the quality and esthetics that our A/E firm had envisioned.

The author of those specifications was my first and most memorable mentor.

Thomas Berger,  
Project Manager

”

BRARY  
PNIA

PROJECT NO. 28105.10

and applicator shall apply hardening/sealing agent. Applicable procedures shall be as recommended by the product manufacturer and as required to test sample.

fining, hardening, dust-proofing, and abrasion resistance of the surface to the natural appearance of the concrete, except for the sheen.

back of adherence to F(f) flatness and levelness specifications can be attained appearance and irregular exposure of aggregate.

oned/Matte Finish, on all surfaces.

commendations to polished concrete.

ee of debris at all times.

as necessary.

ing operations.

ed containers, and in accordance with local

with manufacturer's recommendations.

finished areas from excessive water for a



PROJECT NO. 28105.10

OLD TOWN NEW  
SANTA CLARITA,

## - SECTION 03 30 WATER VAPOR EMISSION CONTROL SYSTEM

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Synthetic or plural polymer type, environmentally safe, penetrating water vapor emission and alkalinity control system
1. Installation of work as covered by Section 01 2100 "Allowances, and as required per the Part 1 - Work Requirements article under this Section.

#### 1.3 WORK REQUIREMENTS

- A. Engage an independent laboratory firm to perform testing of all concrete slabs (on grade and elevated) in accordance with ASTM F-1869, no sooner than 45 days prior to the installation of the finished flooring, scheduled to receive adhered floor coverings, such as carpet, resilient tile, sheet goods, rubber tile, cork tile, ceramic tile and porcelain tile
1. Three test kits for the first 1,000 sq. ft. and one test kit for each 1,000 sq. ft. thereafter in areas scheduled for floor coverings.
- B. Contractor to include in Contract Sum verification of all flooring manufactures substrate requirements for submitted flooring materials in each area to determine remedial work, if any to meet these manufactures requirements for water vapor and alkalinity limits.
- C. Install materials specified under this section as deemed necessary by the Architect based on independent laboratory tests. Work to be paid from a Contingency Allowance as specified in Section 01 2100 "Allowances.
1. Include in Contract Sum the cost for pre and post-installation testing of the concrete slab in accordance with ASTM F-1869 on the interior concrete area of the building slab to receive a floor covering or coatings.

#### 1.4 RELATED SECTIONS

- A. Section 01 2100 "Allowances: for contingency allowance to pay for the of material specified in this Section as deemed necessary independent testing of concrete floors prior to the installation.



# Building Envelope Consulting

DTR is a specialty-consulting firm addressing both the design and performance of the Building Envelope. We take an integrated approach to designing exterior walls, glazing types, curtain walls, window and door openings, deck traffic coatings, green roofs and traditional roofing systems all the way down to the foundation to protect the entire Building Envelope.

Building Code & Good Design Practices requires that the exterior wall envelope be designed and constructed in such manner as to prevent the accumulation of water within the wall assembly by providing a water-resistive barrier behind the exterior veneer. Architecturally, we want our structures to breathe, but not allow water to penetrate into the structure.

## Our Building Sciences Expertise includes:

- Rain Screens
- Architectural glazing performance requirements
- Glass, metal, stone curtain walls
- Structural glass wall systems
- Glass roofs and skylights
- Green Roofing (Intensive, Extensive & Tray Systems)
- Window Washing & Maintenance Equipment
- Roof Fall Protection
- Waterproofing systems
- Breathable (permeable) walls.
- Dimensional stone
- Panelized systems
- Architectural pre-cast Concrete
- Glass-Fiber Reinforced Concrete (GFRC)
- Masonry
- Parking Garage traffic coatings
- Field Mock-up Designs

With the goal to publish clear and concise contract documents, a consulting team must be fully aware of the project scope and their documents must address all details pertaining to that scope. Proper investigations and coordination are required during the design development phases of the project in order to collect the right information. Information must be interpreted in the form of drawings, details and technical specifications that can be understood by the appropriate "audience."

Documents that are produced and published by DTR are assembled with the goal of fully addressing the scope of work contemplated and avoiding any unnecessary change orders during the construction phase.







**DTR Consulting Services include the evaluation of systems, products and components for performance, compatibility and erect-ability in project specific applications, in addition to:**

- Developing system performance requirements
- Preparing or review architectural details and develop specification sections
- Coordinating details with structural and mechanical consultants
- Reviewing bids and bidder qualifications
- Conducting pre-bid meetings
- Administering performance mock-up testing
- Reviewing submittals and mark-up shop drawings for conformance to project requirements
- Conducting pre-construction conferences
- Advising the project team regarding technical and performance issues
- Administering simple field-testing
- Performing construction-monitoring inspections
- Reviewing as-built construction and modifications
- Conducting punch-list inspections
- Administering in-plant inspections



DTR is an independent consultant not affiliated with contractors, suppliers, or manufacturers. We may serve as the Owner's Agent in administering and coordinating construction work, but we do not manage or perform any construction work or sell any construction products.



# Waterproofing Consulting

## Design Services

Our full time technical involvement in the building specifications and product selection assistance services enables us to keep current with the many advancements and new products being introduced by product manufacturers. We maintain an ongoing review program of testing and analyzing new products and procedures in order to evaluate their usefulness to our clients needs. This knowledge of the industry enables us to provide the most applicable specifications for our clients.

In addition to providing the best specifications, our experienced technical staff can assist you in the design of the most appropriate and effective details for our A/E client's projects. These designs are communicated by means of plans and details. Specifications are prepared using Microsoft Word, plans and details are prepared using AutoCad software. Our specifications, plans, and details are suitable for bidding purposes as submitted to the A/E client.

No matter how extensive the details, or how applicable the specifications and drawings, the success of any project is largely dependent on the execution by the contractor. Because of the importance of the execution, we encourage our A/E clients to utilize our on-site quality control inspection and other Contract Monitoring services.







# BUILDING ENVELOPE SCIENCE INSTITUTE INC.

Providing the essential knowlege and skills







## Constructibility/Peer Review

DTR Consulting Services provides two forms of Peer Reviews. Our Complete Check and Redlined Reviews are meant to assist your production team in publishing documents that meet your firm's Quality Control requirements.

Eliminate your clients desire to hire a Construction Management Consultant, for these services. They will not have your best interest at heart, nor respect for your time. Our firm services and reports are tailored to improve your bid documents and minimize your time in a confidential manner, limiting your firm's exposure to excess RFI's, potential change orders and client's scrutiny.

Solano Community College - Measure G Bond Projects  
Bldg 1800B Renovation - Swing Space

### Complete Check Report

Item No: **79**

Potential Value: \$0.00

Cost Impact ☐

Discipline: **AR, ST**

Mech - HVAC ☐

Mech - Plumbing ☐

Mech - Site ☐

Electrical - General ☐

Electrical - Low Volt ☐

Type: **Coordination** ☐

Ommission ☐

Error ☐

Clerical ☐

Constructability ☐

Field Condition Conflict ☐

Standards Deviation ☐

with Architectural Building Sec

Job No: 70 4027

Sheet No: S1.3

Spec. Reference: 19

Detail No:

Elev/Section No:

Other Reference

Architectural ☒

Civil ☐

Geo-Tech ☐

Structural ☐

Landscape ☐

Food Service ☐

Acoustical ☐

Interiors ☐

Other ☐

Owner/Construction Mgr ☐

Disciplinary ☒

de ☐





Confidential in-house peer reviews by our senior A/E professionals whom have real life experience in the construction field, and have been trained in DTR's quality assurance plan check data base programs "Complete Check" and "Redline Review".

Quick turn-around times, allowing A/E firms time to make adjustments in documents prior to release of bid documents.

Reviews include complete review of all discipline drawings and specifications to identify interdisciplinary coordination issues, identification of constructability items, check or references, ADA/Code plan review and facility building standards verification. Field reviews assist in the elimination of potential conflicts, reduction in time consuming questions during construction and potential change order claims.

Our services are tailored to your firms needs, and are designed to assist you in maintaining your firm's high quality assurance standards even when your manpower is limited.

Finally, our understanding of the A/E profession allows us to deliver to you material, which is instantly ready to distribute to team consultants and project architects for actions. We also participate in your project team meeting, presenting these report findings to help identify any larger issues to further assist your team in saving time.

Construction Managers have been marketing services to Building Owners for years for Constructability Reviews in addition to other construction oversight services. These peer reviews expend your project teams valuable time and are mostly design related, not relevant to the project documents or are simply misleading. These reports typically need to be heavily edited before distributing them to your project consultants, with multiple copies of redline drawing sheets having to be coordinated to make sure each consultant gets what they need. Our "Complete Check" review was developed from our founders experience as a Senior Project Manager consistently having to respond to each of many senseless comments in front of the Building Owner, which had the potential of making the Architect look bad as the Construction Manager justifies their importance. Our reviews are confidential and are purely based on the construction documents.

Let us share with you our unique approach, and preview our reports  
& individual comments



# Material Selection Assistance



New building materials, from ever changing manufacturers and technologies, are entering the market everyday. With new green building products and other products being reformulated to meet regulatory requirements, it is hard to keep tabs on all these changes. DTR Consulting Services is involved with approximately \$1 billion dollars in construction projects each year and works with hundreds of designers and product representatives. Our staff has a wide knowledge of available building materials, along with evaluations on new product track records, which we discuss with our clients.

Many general building materials, such as anti-graffiti coatings, joint sealants, metal framing systems, sheet metal flashing and other products are selected by our firm, to be appropriate for the projects use. The specifications include all components associated with the construction of your project.

When materials are not specifically requested by the Architect and Designers, we will suggest a series of manufacturer's products based on performance criteria that would be appropriate to the project, supplying your firm with product cut-sheets as needed.

Our firm routinely connects your staff with the reliable and appropriate manufacturer's representatives that can deliver product samples and explore new product options, saving your staff time and effort.



## Door Hardware Consulting Services

DTR Consulting Services provides the services of an Architectural Hardware Consultant. Whether we write your project specifications or your firm produces your own, having well coordinated, non-proprietary door hardware specifications is a must. Let us work with you to develop an accurate openings list, complete hardware sets and a well coordinated door and frame schedule. This up-front effort directly relates to the amount of time your firm will spend on the construction submittals and potential cost related changes in the field due to incomplete or incorrect hardware sets including incompatibility of hardware doors and frames specified.

The additional benefit of our service is door hardware which is consistent with your design, selection of products that do not impair sightlines and that are appropriate for the usage of the facility and specific opening, regardless of the manufacturer. An unknown benefit is that many times costly proprietary hardware is specified by those free manufacturer's reps without your knowledge, driving costs up on unnecessary items that impact other areas of the project. Free services are not always better.

We will interview your staff using our graphic checklists minimizing your time, while capturing your true design intent.



# LEED Projects & Green Architecture

Sustainable building is the practice of creating structures and using processes that are environmentally responsible and resource-efficient throughout a building's life-cycle: from site orientation to structure design, daylighting, construction practices, operation, maintenance, renovation, and deconstruction. This practice expands and complements the classical building design concerns of economy, utility, durability, and comfort.

New technologies and construction materials are constantly being developed to complement current practices in creating greener construction practices and the built environment. The common objective is that green buildings are designed to reduce the overall impact of the built environment on human health and the natural environment by efficiently using energy, water, and other resources, protecting occupant health and improving employee productivity, plus reducing waste, pollution and environmental degradation.

DTR Consulting Services is consistently reviewing new building products that come onto the market, which contribute to LEED certification, as well as new construction practices which just make good sense. Eighty-nine percent of our projects last year were pursuing LEED certification. The balance of the projects incorporated many green products.



Great projects are the product of thoughtful collaboration resulting from a shared vision of success. DTR Consulting Services has a vested interest in your firm's success. Let our experience and depth of resources assist your team with your next project.

Whether your project simply wants to be green, or certification is your goal, our firm is suited to assist your designers and Architects with new and not so new building products to meet your goals...

*member of*



Let us Help You with your Next Project, Whether You're Seeking  
Project LEED Certification or  
simply wanting to incorporate sustainable Building Products.







## REGIONAL OFFICES

### **Sacramento Area Office**

t: 916.772.3600 | f: 916.772.3633

### **San Francisco North Bay Office**

t: 707.578.3600 | f: 916.772.3633

### **Phoenix Area Office**

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### **Los Angeles Area Office**

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## **Contact Us**

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