



THE QUALTIM FAMILY OF SERVICES

Where building innovation thrives.

Appendix A: Definitions/Commentary

The Definitions/Commentary found here apply to Schedule 1, Appendix B, and Design Drawings; have the following meanings; and provide commentary.

- 1.1 Service Provider means Qualtim, Inc., DrJ Engineering, LLC, Center for Building Innovation, Pushing7, and any use of any generic term for Service Provider including but not limited to engineer, merchant seller, supplier, and/or vendor.
- 1.2 Customer means the company or organization named on the Proposal and any use of any generic term for Customer including but not limited to buyer, client, consumer, patron, and/or purchaser.
- 1.3 Agreement means Customer and Service Provider desire to transact business in a mutually beneficial manner where Customer Communicates to Service Provider a requested scope of work that Customer desires Service Provider to undertake. Service Provider Communicates a Proposal that has specific scope of Services and responsibilities to be delivered. The Proposal becomes a Project obligation when the Proposal is confirmed by Communication between Customer and Service Provider, actions are taken accordingly, and/or any invoice has been paid by the Customer.
- 1.4 Authorized Representative and/or Official Representative is any individual who acts on behalf of the Customer and Service Provider. Each is a primary contact for a Project and its Project Amendments and Deliverables and will maintain Communication to facilitate mutual success. Each person shall have authority for making decisions with respect to:
 - 1.4.1 Performance of their respective Service responsibilities regarding the Project including but not limited to amendments to the Project, Project progress, changes to the Project, budget variances, scope modifications, invoicing, etc.
 - 1.4.2 Business transactions between Customer and Service Provider accounting for and including but not limited to the Project, Project Amendments, Deliverables, Schedule 1, Appendix A, and Appendix B.
- 1.5 Building Envelope is a system or assembly designed to provide weather protection and resistance to design loads. This includes: 1) exterior wall components and exterior wall covering materials that provide protection of the building structural members, including framing and sheathing materials, and conditioned interior space, from the detrimental effects of the exterior environment, and/or 2) a roof covering and roof deck or a single component serving as both the roof covering and the roof deck. A roof assembly can include an underlayment, a thermal barrier, insulation or a vapor retarder.
- 1.6 Building Envelope Design Drawing is a written, graphic, and pictorial depiction of an individual portion of the Building Envelope and may include but is not limited to design of: 1) exterior cladding, 2) exterior continuous insulation, 3) exterior sheathing, 4) cavity insulation, 5) interior finish, 6) permeance, 7) entire external wall assembly performance, 8) thermal performance, 9) weather/water resistive barrier performance, 10) air barrier, etc.
- 1.7 Building Designer is the Owner of the Building or the Person that contracts with the Owner for the design of the Building Structural System and/or who is responsible for the preparation of the Construction Documents. When mandated by the Legal Requirements, the Building Designer shall be a Registered Design Professional.
- 1.8 Building Material Supplier means any entity that supplies materials, services, and/or equipment to be used in conjunction with the performance of work on a construction contract.
- 1.9 Building Official approval.
 - 1.9.1 Approved:¹ Building codes require that the building official shall accept duly authenticated reports² or research reports³ from approved agencies and/or approved sources (i.e., licensed Registered Design Professional [RDP]) with respect to the quality and manner of use of new products, materials, designs, services, assemblies, or methods of construction.
 - 1.9.1.1 Acceptance of an approved agency, by a building official, is performed by verifying that the agency is accredited by a recognized accreditation body of the International Accreditation Forum (IAF).

- 1.9.1.2 Acceptance of a licensed RDP by a building official is performed by verifying that the RDP and/or their business entity is listed by the licensing board of the relevant jurisdiction.
- 1.10 Building Structural System is the completed combination of Building Envelope components, Structural Elements, Trusses, connections, all related parts and pieces, and/or other systems, which serve to transport the Building's self-weight and all code-based and/or specified loads to the foundation or ground, where the intention is to create a load path that is engineering and/or code compliant.
- 1.11 Contractor: Owner of a Building, or the Person who contracts with the Owner, who constructs the Building in accordance with the Construction Documents and the Submittal Package/Truss Submittal Package. The term Contractor shall include those subcontractors who have a direct contract with the Contractor to construct all or a portion of the construction. The Contractor is responsible for all construction means, methods, techniques, sequences, procedures, programs, facilitating the approval of Design Drawings, and safety in connection with the receipt, storage, handling, installation, restraining, and bracing of all Structural Elements and Trusses.
- 1.12 Confidential Information includes, but is not limited to, non-public information related to details, specifications, methodologies, computations, designs, testing, results of testing, engineering, calibrations, calculations, studies, reports, specifications, specialized engineering knowledge, models, computer aided design files, master drawings, sketches, tracings, drawings, special requirements, cost estimates, prices, compensation, research, products, services, developments, inventions, processes, protocols, methods of operations, techniques, strategies, programs (both software and firmware), systems, proposed business arrangements, distribution, marketing, financial, merchandising and/or sales information, individual customer profiles, customer lists and/or aggregated customer data, and all similar information of a sensitive nature.
- 1.13 Completion Date is a date provided in Schedule 1, in a Customer Communication and/or in a Service Provider Communication, as applicable. It is an estimated date, given that the future is not predictable. If the Services are delayed for reasons beyond the control of the Company or Service Provider, the Completion Date will be adjusted in accordance with the length of the delay. In the event of any suspension, delay, or interruption by Company or Service Provider, Company and Service Provider will adjust Completion Date as necessary.
- 1.14 Compensation is for all work performed inside of the Project's scope of work, any designated fees payable, and all out-of-pocket costs directly incurred due to Services provided. Fees and/or fee changes, due to unanticipated scope of work changes by either party, may be set forth in Schedule 1 and/or a Project and/or in a Customer Communication and/or in a Service Provider Communication.
- 1.15 Communication includes but is not limited to invoicing, telephone calls, cellular calls, internet calls, video calls, emails, texts, conferences, meetings, virtual meetings, video meetings, virtual conferences, video conferences, writings, documents, duly authenticated reports,⁴ research reports,⁵ and/or Software.
- 1.16 Communication to Truss Designer. The Truss Manufacturer shall communicate the Truss Design Criteria and requirements to the Truss Designer, and shall review and approve all Design Criteria and Design Drawings.
- 1.17 Communication to Structural Element Designer. The Customer or Truss Manufacturer shall communicate the Design Criteria and requirements to the Structural Element Designer, and shall review and approve all Design Criteria and Design Drawings.
- 1.18 Construction Documents: Written, graphic, and pictorial documents prepared or assembled for describing the design, location, and physical characteristics of the elements, which includes the Building Envelope, Building Structural System, and Framing Structural System, necessary to obtain a Building Permit and construct a Building.
- 1.19 Construction Professionals include but are not limited to building Owner, Building Designer, Architect, Registered Design Professional in Responsible Charge, Registered Design Professional, Professional Engineer, Truss Manufacturer, Building Material Supplier, Contractor (e.g., general, mechanical, electrical, plumbing, Framing, etc.) and/or Subcontractor (e.g., Framing, mechanical, electrical, plumbing, etc.).
- 1.20 Deliverables are created as work prepared by the Service Provider within the scope of the Project and/or Project Amendments, and include but are not limited to data, information, analyses, Design Drawings, Construction Documents, installation documents, Communications, and white papers.
- 1.21 Design Criteria includes information that is accurate, reliable, and sufficient to enable the design of the Building Envelope, Building Structural System, Framing Structural System, and/or all individual Structural Elements

including but not limited to all applied loads, support conditions, anchorage, component connections, deflection limits, moisture conditions, and/or serviceability conditions.

- 1.22 Design Drawing includes but is not limited to Building Envelope Design Drawing, Building Structural System, Framing Structural System Design Drawing, Truss Design Drawing, Truss Repair Drawing, braced wall Design Drawing, all Structural Element Design Drawings (e.g., I-joists, beams, headers, etc.), any Customer's proprietary Design Drawing, Truss Placement Diagrams, Truss placement drawings, Structural Element Placement Diagrams, and/or Structural Element placement drawings.
- 1.23 Document Date is the latest date designated on the Design Drawing and/or Deliverable or the date that a professional engineer sealed and signed the document.
- 1.24 Error, omission, and/or negligence is an action related to the Project, Project Amendments, and/or Deliverables where there is direct evidence that a Service Provider and/or Customer obligation was not performed and caused demonstrable economic harm to the Customer and/or Service Provider.
- 1.25 Framing Structural System is the completed combination of Structural Elements, Trusses, connections, all related parts and pieces, and all load path resisting elements, which serve as the Building's interconnected framework to carry all of the specified loads to the foundation.
- 1.26 Framer is a Contractor or subcontractor whose responsibility includes but is not limited to reviewing and approving the Design Drawings and performing the installation of the structural shell, walls, floors, roofs, sheathing, weather resistant barriers, windows, doors, stairs, connections and all related parts and pieces, which are intended to create a code compliant load path to the foundation.
- 1.27 Information Provided to the Truss Manufacturer. The Contractor shall provide to the Truss Manufacturer a copy of all Construction Documents pertinent to the Building Design, Building Structural System, Framing Structural System, the design of Structural Elements and/or Trusses, the name of the Building Designer if not noted on the Construction Documents, and any other information pertinent to their truss design and manufacturing work. Amended Construction Documents, upon approval through the plan review/permitting process, shall be immediately communicated to the Truss Manufacturer.
- 1.28 Information Provided to the Building Designer. The Contractor, after Review of Submittal Packages and their approval, shall forward the Submittal Package and/or the Truss Submittal Package to the Building Designer for review.
- 1.29 Insurance coverage, terms and minimum requirements are defined as follows: 1) Commercial General Liability policy with \$1,000,000 occurrence limits with no exclusionary language relating to condominiums, multi-family, or multi-unit dwellings; 2) automobile liability coverage with a combined single limit of \$1,000,000; 3) workers' compensation insurance providing statutory benefits imposed by applicable state law; and 4) Professional Liability/Errors and Omissions Insurance policy (including contractual liability and prior acts coverage for the Deliverables provided to Customer) with policy limits of:
 - 1.29.1 DrJ Engineering: \$3,000,000 per claim and \$3,000,000 in the aggregate, with a deductible of no more than \$50,000.
 - 1.29.2 Qualtim: \$1,000,000 per claim and \$1,000,000 in the aggregate, with a deductible of no more than \$50,000.
- 1.30 Intellectual Property (IP) and Trade Secrets (TS) means any new knowledge that is derived from specific information provided by the Customer, which is then used in work prepared by the Service Provider within the scope of the Project and/or Project Amendments and delineated in a Deliverable.
 - 1.30.1 All ideas, engineering analysis, and test data are proprietary IP and TS and should not be provided to anyone. In particular, public regulatory officials are subject to freedom of information act requests and that means that IP and TS are in the public domain when any information is provided. The [federal government](#) and each state have a [public records act](#). In addition, each state also has legislation that mimics the federal [Defend Trade Secrets Act 2016](#) (DTSA), where providing test reports, engineering analysis, and/or other related IP/TS is subject to [a \\$5,000,000 fine and/or 3 times the value of](#)⁶ the IP/TS.
 - 1.30.1.1 Notice of immunity provision. Immunity. —An individual shall not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret that—

- 1.30.1.1.1 (A) is made—
 - 1.30.1.1.1.1 (i) in confidence to a Federal, State, or local government official, either directly or indirectly, or to an attorney; and
 - 1.30.1.1.1.2 (ii) solely for the purpose of reporting or investigating a suspected violation of law; or
- 1.30.1.1.2 (B) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.
- 1.31 Instruments of Service are designs, documents, specifications, and reports prepared by or on behalf of the Project including but not limited to plans, sketches, drawings, graphic representations, computer-generated designs/materials, and Design Drawings.
- 1.32 Ownership means the specific Work Product and/or Deliverable prepared by the Service Provider within the scope of the Project and/or Project Amendments.
- 1.33 Placement Diagram illustrates the assumed location of each individual Structural Element.
- 1.34 Project is a Proposal that has specific scope of Services and Deliverable responsibilities that have been confirmed by Communication between Customer and Service Provider and/or actions taken.
- 1.35 Project Amendments are updates to and/or changes made that include but are not limited to actions taken, activities, budgets, Communications, Project Deliverables, scope modifications, Project Completion Dates, and/or tasks.
- 1.36 Project Documents are specific information provided by the Customer, which are then used in work prepared by Service Provider within the scope of the Project and/or Project Amendments.
- 1.37 Proposal is an estimated cost and/or estimated budget pursuant to a request by Customer for specific Services to be provided by Service Provider.
- 1.38 Reference Sheet provides important application, installation, and safety commentary regarding each Design Drawing, which may be referenced within a Design Drawing and/or as part of a Submittal Package.
- 1.39 Repair Criteria includes information that is accurate, reliable, and sufficient to enable the design of the repair of a Structural Element including but not limited to the existing Design Drawing, a picture of what needs to be repaired, the location of damage, the type of damage, location of MEP, anchorage, bearing conditions, moisture conditions, and/or serviceability conditions.
- 1.40 Required Information in the Construction Documents. The Building Designer, through the Construction Documents, shall provide information sufficiently accurate and reliable to be used for facilitating the design and supply of the Building Structural System, Framing Structural System, Building Envelope, Structural Elements, and all information required to create a design of each Truss/Structural Element for the Building.
- 1.41 Review of Submittal Packages. The Customer (e.g., Truss Manufacturer) shall supply to the Contractor the Submittal Package and/or the Truss Submittal Package, which includes but is not limited to the Design Drawings, Building Envelope Design Drawings, Truss Design Drawings, Placement Diagram(s) and/or Truss Placement Diagram(s), the required Permanent Individual Truss Member Restraint location and the method to be used to properly brace the Structural Elements and/or Trusses as pertinent, any other Building Envelope/ Building Structural System/Framing Structural System details germane to the Project, etc. The Contractor, after reviewing and/or approving the Submittal Package and/or the Truss Submittal Package, shall forward the Submittal Package and/or the Truss Submittal Package to the Building Designer for review. The Building Designer shall review the Submittal Package and/or the Truss Submittal Package for compatibility with the Building design. All such submittals shall include a notation indicating that they have been reviewed and whether or not they have been found to be in general conformance with the design of the Building. The Contractor shall not proceed with the Structural Element and/or the Truss installation until the Submittal Package and/or the Truss Submittal Package has been reviewed and approved by the Building Designer, including a notation indicating that they have been reviewed and found to be in general conformance with the design of the Building.
- 1.42 Review and Coordinate Submittal Packages. The Owner or Owner's representative shall be responsible for ensuring that the Review of Submittal Packages requirement is accomplished.
- 1.43 Selectable Software Parameters are the Software and engineering parameter choices and subsequent decisions made the by the Customer as it utilizes proprietary Software. This includes but is not limited to all

specific choices for coordinate geometry, layout, all general and specific design loads, design, manufacturing, inventory, building code, analog, joint fixity, joint stress index, reaction conditions, deflection conditions, quality, etc.

- 1.44 Services are the specifically defined actions, activities, and/or tasks requested by Customer to be performed by Service Provider, which are delineated in a Proposal, Project, and/or Customer/Service Provider Communication.
- 1.45 Single Truss Component Design is defined as the Truss Design Engineer being solely responsible for designing a single Truss, which is depicted on each Truss Design Drawing.
- 1.46 Single Structural Element Design is defined as the Structural Element Design Engineer being solely responsible for designing each single Structural Element depicted on the Design Drawing.
- 1.47 Software includes but is not limited to proprietary programs that are used to direct the operation of a computer to undertake tasks that include but are not limited to Building Envelope Design, Building Structural System design, Framing Structural System design, Structural Element Design, Design Drawings, building design, code compliance assessments, load path resistance, connection design, framing or Structural Element Placement Diagrams, Structural Element layouts, manufacturing management, inventory management, quality management, and/or engineering mechanics calibration to test data.
- 1.48 Submittal Package includes but is not limited to each individual Design Drawing, Placement Diagram(s), general bracing details, Lateral Restraint & Diagonal Bracing details, any Building Envelope/ Building Structural System/Framing Structural System details, etc. needed for the Construction Professionals to review, approve, and use as pertinent to their professional work.
- 1.49 Structural Element is any component that resists applied loads due to any load path from the roof to foundation. Types of components include but are not limited to I-joists, joists, headers, beams, Trusses, wall panels, floor panels, roof panels, footers, composite structural lumber, laminated veneer lumber, parallel strand lumber, oriented strand board, plywood, rimboard, hangers, connectors, nails, staples, screws, etc.
- 1.50 Structural Element Design Criteria and Requirements. The Customer or Truss Manufacturer shall obtain the Design Criteria and requirements from the Construction Documents.
- 1.51 Structural Element Design Drawing is any Design Drawing for any Structural Element.
- 1.52 Structural Element Designer: Person responsible for the preparation of all Design Drawings, employed/engaged by the Customer or Truss Manufacturer.
- 1.53 Structural Element Design Engineer is a person who is licensed to practice engineering as defined by the legal requirements of the jurisdiction in which the Building is to be constructed and who supervises the preparation of the Design Drawings. The Structural Element Design Engineer is not the roof system designer nor the Building Designer.
- 1.54 Truss is an individual metal-plate-connected wood component manufactured for the construction of a Building.
- 1.55 Truss Design Criteria and Requirements. The Truss Manufacturer shall obtain the Truss Design Criteria and requirements from the Construction Documents.
- 1.56 Truss Design Drawing is a written, graphic, and pictorial depiction of an individual Truss.
- 1.57 Truss Designer: Person responsible for the preparation of all Truss Design Drawings, employed/engaged by the Customer or Truss Manufacturer.
- 1.58 Truss Design Engineer is a person who is licensed to practice engineering as defined by the legal requirements of the jurisdiction in which the Building is to be constructed and who supervises the preparation of the Truss Design Drawings. The Truss Design Engineer is not the truss roof system designer nor the Building Designer.
- 1.59 Truss Manufacturer is the person responsible for the Selectable Software Parameters and is engaged in the fabrication of Trusses. The requirements of the Truss Manufacturer include determining the Truss Design Criteria, where the Truss Manufacturer shall obtain these requirements from the Construction Documents. The Truss Manufacturer responsibilities include but are not limited to the review and approval of each Truss Design Drawing, each Truss Placement Diagram/drawings, all related manufacturing parameters and requirements prior to manufacturing the Trusses, etc. Truss Manufacturer shall deliver the Truss Submittal Package to the

Contractor for Review of Submittal Packages, so that all review and approval decisions can be made prior to manufacturing the trusses.

- 1.60 Truss Submittal Package includes but is not limited to each individual Truss Design Drawing, Truss Placement Diagram(s), the Cover/Truss Index Sheet, Lateral Restraint and Diagonal Bracing details designed in accordance with generally accepted engineering practice, applicable BCSI-defined Lateral Restraint and Diagonal Bracing details, and any Building Envelope/Building Structural System/Framing Structural System details germane to the Trusses, etc. needed for the Construction Professionals to review, approve, and use as pertinent to their professional work.
- 1.61 Work Authorization is Communication between Customer and Service Provider regarding activities, tasks, and/or actions requested by the Customer to be performed by the Service Provider, which becomes a Project when confirmed in any Communication between Customer and Service Provider, and/or actions are taken.
- 1.62 Work Product are the Deliverables prepared by the Service Provider within the scope of the Project and/or Project Amendments.
- 1.63 Interchangeability of words where words used in the present tense include the future; words stated in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural, the singular.
- 1.64 Where not defined in Appendix A, capitalized terms and responsibilities are defined pursuant to the applicable building code, applicable reference standards, the latest edition of TPI 1, the NDS, AISI S202, applicable professional engineering law, Appendix B: Project/Deliverables, Appendix C: Intellectual Property and Trade Secrets, definitions created within Design Drawings, and/or definitions within Reference Sheets. Beyond this, terms not defined shall have ordinarily accepted meanings as the context implies.
- 1.65 Appendix A supersedes all prior versions and understandings with respect to Appendix A and all prior transactions. In addition, Appendix A may be updated periodically during the year, where the current version is available twenty-four (24) hours per day, seven (7) days per week for review, comment and Customer feedback regarding changes.

¹ Approved is an adjective that modifies the noun after it. For example, Approved Agency means that the Agency is accepted officially as being suitable in a particular situation. This example conforms to IBC/IRC/IFC Section 201.4 where the building code authorizes sentences to have an ordinarily accepted meaning such as the context implies.

² <https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1707.1>

³ <https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1703.4.2>

⁴ <https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1707.1>

⁵ <https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1703.4.2>

⁶ <https://www.law.cornell.edu/uscode/text/18/1832#:~:text=Any%20organization%20that,has%20thereby%20avoided.>