

SECTION 05730 Q&A

SHANNON CORPORATION

329 Boston Post Road
Millbrook Office Park
Sudbury, Massachusetts 01776

Prepared by
William L. Shannon, B.S.B.A., CSI, Cisca
President, Shannon Corporation
© 1996 William L. Shannon
Revision # 8 January 2007

Topic:

Specifying Pre-engineered Custom Metal Ceilings, Custom Metal Wall Panels, Custom Metal Column Enclosures and Custom Metal Light Forms in a Separate Specification Section vs. *Inclusion in a section including miscellaneous metal, standard acoustical ceilings or drywall.*

Q Why would I want to specify pre-engineered specialty metal ceilings, wall panels, column covers and lighting forms in their own separate section?

A Construction projects are a very complex matrix of trades, materials and systems. Pre-engineered specialty metal ceiling systems, wall panels, column enclosures and lighting forms should be installed by a specialty subcontractor. Therefore, it is important to specify them in a unique specification section to enable the specialty subcontractor to focus upon that section only, and eliminate the need to bid all of the other non-specialty components on the project.

Q Would any ceiling, drywall, or miscellaneous metal contractor be well qualified for their installation?

A No. Many interior, ceiling, drywall or miscellaneous metal contractors are very proficient at their trades but not familiar with or qualified to install complex pre-engineered finished interior systems. To assure the best budget balance in a project, it is a good idea to specify the commodity interior finishes in their traditional section but the Pre-engineered specialty metal ceilings, wall panels, column covers and lighting forms in their own separate section. The best way to assure a quality installation of specialty materials is to be assured that mechanics and contractors most familiar with the individual components are the mechanics and contractors installing them.

Q What would be the most appropriate CSI Specification section for these specialty items?

A CSI has prepared a CSI Master Format that was released in the Past few years. In the new format there is a Section Number 05730, Ornamental Formed Metal. This would be an appropriate home for these unique specialty products. It is extremely important that no other materials be included in the section i.e. miscellaneous metal. This section of the specification should NOT be a file sub-bid section (applies to Massachusetts Projects only). It is also extremely important that the specification be very precise regarding performance criteria. This should include, but not be limited to, the following:

- a) Metal types and thickness.*
- b) Acceptable welding and fastening techniques.*
- c) Perforation patterns and tolerances.*
- d) Precise finish specification, including tolerances.*
- e) Single source manufacturer for all components in the section.*
- f) All suspension details and acceptable tolerances for all components.*
- g) A pre-qualification clause regarding the number of years producing these materials and the number, types and size of projects manufactured and completed.*
- h) Panel deflection, system perimeter details, panel joint details, and system connection tolerances.*

Q What should the specification section be called?

A Section 05730, Pre-engineered Custom (type of metal or metals, i.e.: aluminum, or stainless steel) Ceiling, Wall Panel and Column Cover Systems (and other components included in the systems design).

Q What does the term Pre-engineered mean?

A Pre-engineered, as used in the specialty architectural products industry, means that a product is designed in collaboration with the architect, local Manufacturer's Representative and factory engineers. It is then manufactured as a finished product in the factory and shipped to the project to allow installation with a minimal amount of field cutting and/or fabrication. The interface details are generally solved in the shop drawing phase utilizing the most current CAD Technology.

Pre-engineering eliminates the shipment of a "kit of parts" or "stick built systems" and guarantees a much higher level of finished product. All components for hanging ceilings, installing wall panels and column covers, or attaching and/or suspending light forms are part of a complete factory engineered system, and delivered as a complete package.

Q Why would I specify a Pre-engineered system in lieu of “a kit of parts” or “stick built system”?

A To assure a higher quality finished product. To eliminate costly and questionable field fabrication. To speed ease of installation and minimize field construction time. To provide complete factory fabricated and factory quality controlled finished products.

Q Will this approach be more costly?

A NO! Generally this approach leads to significant savings. Manufacturers of custom metal ceiling systems, wall panels, column covers and lighting forms are specialists. They know the most current technology for hanging ceilings, installing wall panels, installing column covers and lighting forms, without the use of exposed fasteners, field welding or grinding, pop rivets, or field painting. All with the tolerances normal for high quality, pre-engineered metal products. Experience has shown savings of up to 50% .

Q Why are the answers to these questions important to my client and me?

A Because the marketplace is full of failed examples of extraordinary design concepts. Virtually any architect asked will share disappointing experiences with specialty metal ceilings, column covers, wall panels and lighting forms. Careful analysis of why, will generally reveal that these specialty items were included in inappropriate sections of the specification. Experience has definitely shown, that if these items are carefully specified in their own specialty section, you will be assured that a competent team of specialists will be producing and installing your project. You will further be assured of compliance with the most current interior construction technology, and a satisfactory rendition of your design concept and intent.

Q Where do I find the information necessary to approach my project in this manner?

A From you local Manufacturer’s Representative. Be sure to ask to review their “body of work ,” and carefully check their references. Look at photographs, review samples of their shop drawings, visit their projects, and speak to their former and present clients. A Manufacturer’s Representative acts as an unpaid professional consultant to you and your client, and most qualified representatives will bring years of valuable experience to you. A qualified Manufacturer’s Representative works on hundreds of projects each year, enabling them to help you with your design solutions and to avoid costly mistakes.

A qualified representative will be able to provide you with appropriate material samples, details and sample specifications, as well as examples of shop drawings from other projects. Budget pricing is also provided to assure that your project will be within the established budget parameters.

Competent Manufacturer's Representatives work with your team from the conception of the project, through design development, construction documents, bidding and construction. They provide the interface between the factory and the design professional.

Q **What is the next step?**

A *Review this concept with your "in house" specification, writer or your independent specification consultant. You will find that they embrace this approach to assure a successful project for you and your client.*

Mr. Shannon has been involved in the specialty architectural products business since 1968. As an interior sub-contractor, manufacturer and Manufacturer's Representative, he has worked on Pre-engineered metal ceiling, wall, column cover and lighting form projects, as well as many other custom architectural products and systems throughout the United States and around the world.

He has served on the manufacturer's advisory councils for many specialty architectural products manufacturers, and has been elected as the Manufacturer's Representative member of the CISCA Board of Directors for 1998-1999, 2000-2001, and 2006 to present.

Mr. Shannon graduated from Northeastern University in 1968, with a Bachelor of Science in Business Administration, was a charter member of the Long Island Chapter of Construction Specification Institute, and was certified by the Kodarus and Lindahl Acoustical Training School. He is a current Board Member of the Boston Chapter of the Construction Specification Institute, member of The Massachusetts Building Congress, NAHRO, and The American Correctional Association. Mr. Shannon is currently Chairman of the CISCA (Ceiling and Interior System Construction Association) Publication Committee, CISCA Membership Committee and has been writing "Point of View", a regular Column in CISCA's, Interior Construction Magazine, for the past ten years.

As a member of the CISCA Sub Committee for Metal Ceilings in the Correctional Industry, he has worked on the development of standards for and the publication of, "Acoustics in Correction." Mr. Shannon has collaborated in the development of numerous unique architectural systems, and products, and currently serves on five industry advisory councils.

Shannon Corporation has been involved in the design and fabrication of specialty architectural products on more than 5000 projects since it's founding in 1980, and has been awarded more than forty industry awards. Current projects span the United States and five foreign countries.

References:

CSI Construction Specification Institute
CISCA Ceiling & Interior Systems Construction Association
