



Engineering Law and Cooperative Purchasing for Roofing in North Carolina

Is the Fox Guarding the Henhouse?

Part 1 of a 2 part discussion

By: Scott Hinesley, PE, RRC
REI Engineers, Inc.

Background

The need to repair or replace roofing systems in the public sector is a hot debate. What is the best method for ensuring the owner receives a quality product for their investment while protecting the public at large?

In recent years there has been an increase in the use of cooperative purchasing to award roof construction projects in the public sector. This practice is advertised by the cooperative purchasing agencies to speed up the award of construction projects at an agreed upon (and allegedly lower) cost.

This series will explore this practice in the roofing industry and identify financial, safety and legal pitfalls that may be overlooked.

The terms "Engineer" or "Engineering" used herein could be replaced with "Architect" or "Architecture" and not diminish the intent.

Cooperative Purchasing Project Delivery

Generally stated, cooperative purchasing is an agreement whereas public or private businesses or entities pool demand for purchasing products at previously agreed upon prices. Often times, these products are delivered at a reduction in cost due to the economy of scale.

Think, for instance, of a school system that wishes to purchase pencils in bulk. Currently, at a national retailer, a 24 pack of pencils costs \$6.39 (\$0.27/pencil) while a 72 pack from the same manufacturer costs \$11.00 (\$0.15/pencil). That is a whopping savings of 44% per pencil when purchased in bulk. The larger the quantity of items purchased, the lower the cost of the individual unit. The concept is the same as the idea behind cooperative purchasing. Multiple companies or public entities create the larger quantity need, therefore, the supplier can reduce the cost accordingly. Sounds great, right?

A nationwide lumber retailer lists an 8 foot long 2x4 for \$2.67 each in Charlotte, NC. That same retailer lists the same 2x4 for \$2.52 in Miami, FL and \$2.95 in Manhattan. If a group of companies or public entities decided to pool their interests to form a cooperative agreement for purchasing lumber with this retailer, what would be the agreed upon cost for a 2x4? This agreement could result in purchasers in Charlotte, NC paying 10.5% more for their lumber than they otherwise would, and purchasers in Miami, FL paying a 17% premium.

This analogy may overly simplify the concept, however it brings up an interesting consideration. Generally, the supplier will price the materials based on cost and profit; and therefore, regional differences that may provide a price advantage for some will be lost in the process.

For a roofing project under a cooperative purchasing agreement, a roof system manufacturer typically acts as the designer by working with the owner to create specifications with products purchased through the cooperative purchasing agency. This practice creates a conflict in that it is in the designer's (in this case the material manufacturer) best financial interest to specify products that will generate income for said manufacturer.

A brief internet search returns a long list of cooperative purchasing agencies. Most are private for profit corporations that offer products and services to K-12 School Districts and Higher Education Facilities throughout the United States. Although none of the agencies researched listed fees on their website, it has been widely reported that a 4% markup on sales is standard in the industry. Additionally, as explained later, cooperative purchasing agencies only list a few (in many instances, one) product manufacturers thereby removing one level of competition from the process.

This results in a minimum 4% premium being paid in addition to the costs associated with decreased competition and proprietary specifications.

Conventional Design – Bid – Build Project Delivery

The traditional method of Design-Bid-Build incorporates a designer (generally an Engineer or Architect) and a Contractor; both working directly for the Owner. The designer determines the Owner's needs and works within the budget limitations to prepare construction specifications and details (including specific products and/or material performance requirements) based on these factors. Generally, designer's fees are fixed, and negotiated on the front end of a project. The designer should not have a financial interest in the products being specified; if he or she does, then an unnecessary bias can be introduced. Contractors bid on the project based on the requirements outlined and the project is typically awarded to the lowest responsive bidder.

When the specifier lists multiple product manufacturers, each manufacturer submits price sheets to the contractors during the bid process. The contractors select the materials based on which product or manufacturer will give them the greatest advantage for securing the project. Since the manufacturers are aware of the competition from other vendors, they provide their pricing similarly (what gives me the best opportunity for securing this project?).

In this instance, bids are based on multiple levels of competition; material manufacturers, subcontractors and contractors all bidding on the same project.

In a cooperative purchasing project delivery, the manufacturers are limited to those who have agreed to work with the agency. Upon searching several of the cooperative purchasing agencies websites (in most instances), one would find only one or two manufacturers listed for roofing products. The use of one of these cooperative agencies removes the level of competition between different manufacturers (on top of the 4% agency markup). In a public setting, this could result in a substantial increase in cost to the taxpayers compared to that realized by a Design-Bid-Build process.

Up Next: Part 2 - State Laws, Case Study & Breakthroughs in Public Awareness



REI Engineers provides expert design and remediation consulting for building envelope (BE) systems including roofing, waterproofing, windows and exterior walls. Our clients are school systems, building owners, facility managers, design professionals and contractors throughout the Eastern United States.

Our highly trained team consists of Licensed Engineers and RCI, Inc. Registered Professionals including Registered Building Envelope Consultants (RBEC), Registered Waterproofing Consultants (RWC), Registered Roof Consultants (RRC), Registered Roof Observers (RRO), and Registered Exterior Wall Consultants (REW). Since our inception we have grown to more than 50 full time professionals with 5 offices throughout the southeastern United States.

North Carolina Locations

9121 Anson Way
Suite 100
Raleigh, NC 27615
919.845.1450

1927 JN Pease Place
Suite 201
Charlotte, NC 28262
704.596.0331