

# THE PRIME MECHANICAL CONTRACTOR

A position paper prepared and supported by the national, provincial and regional offices of the Mechanical Contractors Associations.

# RESPONSIBILITY... ACCOUNTABILITY... COST EFFICIENCY...

A building, like a living being, must breathe, take in nourishment, generate warmth, remain protected against potential harm, and be able to cry out for help when threatened. It also contributes to society by safeguarding and transporting goods or people.

As in a living being, the life systems are complex and intertwined. Those who think of them simply as a grid of pipe, wiring, metal, and gears laid out to a predetermined plan don't understand the artistry and delicacy with which a building's mechanical services have been conceived and developed. They don't see the intricate detail and precision that goes into their design, assembly, and installation.

The complexity of building systems is so significant that it's a tribute to the industry's cooperation and coordination every time a major project is concluded. To complete a project on time and within budget requires management and administrative skills of the highest order, and full reliance on the professionalism of the entire team.

Responsibility propagates to various trade groups involving several different trades. It is at this point that the industry has had to develop innovative approaches to the coordination of so many trades on complex project. Consolidating responsibility into logically related segments is the only method that a construction and design team can use to cope with such detail. This is the most effective tool it has. Without this consolidation, it is doubtful whether major projects could even commence.

The methodology our industry has found to work best is to delegate full and total responsibility of the mechanical package to the *Prime Mechanical Contracting* professional. The *Prime Mechanical Contractor* is responsible for selecting and coordinating mechanical subcontractors with the skill and strengths suited to the project.

Through the entire project, *Prime Mechanical Contractors* assume full responsibility for all mechanical related service and activities. The construction and design team needn't worry about scheduling, payment of subcontractors, the effect of a subcontractor defaulting, or warranting completed building systems. The mechanical subcontractors understand and appreciate that the *Prime Mechanical Contractor* provides a single, reliable control point for them. Otherwise they would be left to their own devices in negotiating and coordinating with a multitude of other groups. The administrative savings alone are considerable!

The *Prime Mechanical Contractor* is the single authority on complex, vital mechanical systems. For the building to function at all, these elements must work as an entity. Each one is commissioned for the first time and carefully tested.

After the building is completed and operational, the prime mechanical contractor remains on-call for any warranty work. It is not unusual for owners to safeguard their investment by retaining the **Prime Mechanical Contractor** for the maintenance of the entire mechanical system.

The *Prime Mechanical Contractor* is your quarantee of cost effective, worry free and safe project!

A successful building is the sum of its parts!

A successful project is the sum of its partners!



# COOPERATION... COORDINATION... SIMPLIFICATION...

#### **Tendering Documents and Procedures**

It is at the tendering stage that everyone involved in the project, including the owner, makes or loses money. Correct interpretation of the designer's intents (which cannot be seen when focusing on a single element) is absolutely vital. **Prime Mechanical Contractors** can see areas that present potential problems or conflicts that may require special handling. They have the expertise to visualize and predict outcomes because many mechanical items, which are their areas of expertise, are reactive.

#### **Avoiding Conflicts**

One example of a conflict, on separately contracted projects, is where one or more contractors relocate services previously installed because no one firm was assigned the overall responsibility for co-ordination. Tact and appreciation of on-site observances are needed to mediate any conflict should it arise. By ensuring that one **Prime Mechanical Contractor** is responsible for all mechanical related work, the design authority is assured that all the services run as they should.

#### Responsibility

The **Prime Mechanical Contractor** is totally conversant with accepted engineering principles, all the skills of each mechanical sub trade, the manufacturers who supply the complex equipment and the mechanical operation of the equipment itself. **Prime Mechanical Contractors** stay current with new product innovations, legislation, and changes within the construction industry. The **Prime Mechanical Contractor** regards the walls and ceilings of a building as the skin of a body so they take great care of each system and are focused on giving the functionality and personality.

#### **Major Systems**

Site Services; Plumbing, HVAC, Fire Suppression, Automated Controls, Refrigeration Systems; Insulation; Specialized Process Systems (e.g.: medical gas/hydraulics). The **Prime Mechanical Contractor** is the single source of authority on all of these complex vital elements and more. They must work together as an entity. The **Prime Mechanical Contractor** ensures that they do just that!

#### Scheduling

The best way to avoid confusion is to "plan it out of existence" with insightful scheduling and teamwork. **Prime Mechanical Contractors** provide a single, consolidated master schedule for the project portion of any venture. **Prime Mechanical Contractors** are considered experts at logistics. Successful schedule management depends on knowing the precise sequence in which components must be put in place and exactly how long it takes to accomplish a given task. Co-operation and teamwork between the **Prime Mechanical Contractor**, the manufacturer, the shipper, the municipality, the weather, and the traffic are all areas within the realm of their expertise.

#### **Interference**

The amount of detail is staggering, with administration, legalities, physics, design, and economics of a project. There are numerous engineers, architects, and designers involved and there is only a **Prime Mechanical Contractor in** between. With their extensive experience they take "lines and symbols" on paper and turn them into reality.

#### **Financial Stability**

When the **Prime Mechanical Contractor** assumes responsibility for the total mechanical services on a project, they assume full financial responsibility for every one of their sub trades as well. Any headaches encountered are theirs.

#### **Economics**

The single most powerful management tool that the construction and design teams have, is integrating financial responsibility into blocks. Instead of a series of fragmented bids for mechanical services, a **Prime Mechanical Contractor** ensures there is only one to be reviewed. The alternative is to deal individually with all of the sub trades and the number of parties to coordinate jumps from one to a multitude.

## **Lower Coordinating Costs**

Mechanical services in a building touch on every field of engineering and all the other trades present. Every room and each section of a building accommodates a mechanical device, so all the mechanical trades are involved in the sequence of every element of construction. **Prime Mechanical Contractors** have the skill to eliminate issues that may arise from improper sequencing. They take full responsibility for their decisions.

# Commissioning

The **Prime Mechanical Contractor** has the knowledge and <u>is the authority</u> on the complex, vital mechanical systems. For a building to function, these elements must work as an entity. Each one is started for the first time and carefully tested. Even in the most carefully thought-out situation, systems impinge on each other and may react in unexpected ways. They must be carefully tuned to one another and brought to full performance capability. Astute owners will insist that the people who know the building best, the **Prime Mechanical Contractor**, continue to maintain its vital systems.

#### Warranty

The concept of *Total Mechanical Responsibility* is most important in warranting. Without a **Prime Mechanical Contractor's** services, there would be overlapping warranties from suppliers and installers. Warranty to fulfillment would become a nightmare for the owner.

## **Owners/Architects/Engineers**

Lowest cost. Within budget. Functional design. Economical and efficient environment. These are all important issues for owners, architects, and engineers. They have all learned, through experience that developing working partnerships with **Prime Mechanical Contracting** professionals is the best route to continued success in achieving a common goal. The **Prime Mechanical Contractor** works with these partners to resolve the logistical complexities involved in the joining of disciplines to turn conceptual designs into reality.

# FOR MORE INFORMATION, PLEASE CONTACT THE NATIONAL MCA OFFICE OR THE OFFICE NEAREST YOU...

# **National Office**

Mechanical Contractors Association of Canada

601 – 280 Albert Street, Ottawa, Ontario K1P 5G8 Tel: 613.232.0492 Fax: 613.235-2793 eMail: mcac@mcac.ca Website: www.mcac.ca



#### **Provincial Offices**

MCA British Columbia Dana Taylor Tel: 604-205-5058 danat@mcabc.org

MCA Saskatchewan Judy Nagus Tel: 306-664-2154 mcask@sasktel.net MCA New Brunswick Inc. Bill Dixon Tel: 506-857-4128 bdixon@mneca.ca

CANS, Nova Scotia Duncan Williams Tel: 902-468-2267 dwilliams@cans.ns.ca MCA Alberta Hans Tiedemann Tel: 403-250-7237 hans@mcaalberta.com

MCA Manitoba
Betty McInerney
Tel: 204-774-2404
bettymcinerney@mts.net

MCA Ontario Steve Coleman Tel: 905-856-0342 steve@mcao.org

CMMTQ
Andre Bergeron
Tel: 514-382-2668
abergeron@cmmtq.org

MCA Newfoundland & Labrador Dave Dawe Tel: 709-747-5577 ddawe@nfld.net

Contractors Association of PEI Mary MacDonald Tel: 902-566-3456 wmm@wmm93.pe.ca

#### **Ontario Offices**

MCA Thunder Bay / Zone 1 Jim Moshonsky

Tel: 807-613-6414 venshore@tbaytel.net

MCA Sault Ste. Marie / Zone 2

Rick Thomas Tel: 705-759-8830 <u>Thomas.ssmca@shaw.ca</u>

MCA Sudbury / Zone 3 Teresa Deck Tel: 705-673-5619 tdeck@sudburyca.com

MCA Windsor/ Zone 4 Jim Kennedy Tel: 519-974-3411 jkennedy@meshqroup.ca

MCA Sarnia / Zone 5 Andy Pilat Tel: 519-344-7441 sca@bellnet.ca MCA London / Zone 6 Bill Besterd

Tel: 519-672-8454 bbesterd@besterd.ca

MCA Kitchener / Zone 7 Loraine Berge

Tel: 519-885-0431

loraine@mcakitchener-waterloo.com

MCA Niagara / Zone 8 Sue Phillips Tel: 905-688-0376 mcaniagara@bellnet.ca

MCA Hamilton / Zone 9 Wanda Heimbecker Tel: 905-522-1965 manager@mcahamilton.org

MCA Barrie / Zone 10 Ed Morris Tel: 705-726-6024 carlmor@apexia.ca MCA Toronto / Zone 11 Brian McCabe Tel: 416-491-9004 mccabe@mcat.on.ca

MCA Kingston / Zone 12 Jeff Green Tel: 613-541-0633 greenj@bellnet.ca

MCA / Zone 12 West David Dobbin Tel: 705-745-5451 dave@adamsonanddobbin.com

MCA Ottawa / Zone 13 Robert Martel Tel: 613-237-1491 mcaottawa@on.aibn.com

