



SOME TIPS ON HOW TO OBTAIN A COMPETITIVE NUROOF RETROFIT ESTIMATE

PLEASE READ FIRST: It is extremely important to understand that an existing building's structural roof system most likely was designed based on the roof's design live, snow and wind loads which have been applied uniformly by means of decking and joists or similar substrate assemblies. MBCI's NuRoof Retrofit Systems will replace this uniform load with a series of concentrated loads onto the existing roof system, which may not be feasible in all applications. Before MBCI can generate an estimate on any retrofit project, the existing roof's structural framework must be identified. These instructions are intended to define what necessary information is required for MBCI to preliminarily engineer and estimate a project.

AVAILABLE FORMS: The following form is available and will assist you with communicating the information of the existing buildings structural framework to MBCI's Estimating Department.

Request for Information (RFI) – This two-page form has been designed for you to simply check the type(s) of framework used on the existing building(s). The first part of this form describes eight types of roof support systems and requests specific information for each roof type selected. The second part of this form illustrates what information is needed on the existing roof's perimeter and edge construction.

INFORMATION NEEDED: To ensure that an accurate and competitive MBCI estimate can be produced, an inspection needs to be performed of the existing roof and its support system to provide the following information.

1. Illustrate the existing roof's geometry and the construction type at its edges

The answers to the following focus mostly on the physical shape and geometry of the existing roof and how the roof edges are constructed.

- A. Describe any slope that exists if the roof is not dead-flat.
- B. Describe changes in elevations for areas within the perimeter if the roof is not one contiguous plane. Also locate interior firewalls/parapets that might protrude through the roof that will require extending through the new roof.
- C. On a roof plan sketch locate any adjacent buildings that are higher in elevation and are within 20 lineal feet from the roof that will be retrofitted. The vertical dimensional distance is to be provided between the two roofs.
- D. On page 2 of the RFI Form, describe the existing roof edges. These include gravel stops and/or parapet walls. Pay special attention to determine if parapets are load bearing or non-load bearing.

2. On page 1 of the RFI Form, please provide the following

- A. Project Information and Design Criteria as shown
- B. Select each construction type pertaining to the existing roof as provided on Page 1.
- C. Identify the following as applicable to each construction type:
 - a. Joist/Purlin type
 - b. Joist/Purlin span direction
 - c. Joist orientation to the new roof slope (parallel or perpendicular)
 - d. Joist spacing
 - e. Decking type and depth
 - f. Substrate type and thickness

3. Mechanical Equipment on the existing roof

For any existing rooftop equipment to be accommodated by MBCI's NuRoof framing system, please provide the following:

- A. Indicate on a roof plan sketch the locations and dimensions of all mechanical equipment (air-handlers, air-intakes, etc.).
- B. Provide the dimensions from the nearest roof edges as well as their physical size and height above the existing roof.
- C. If any existing equipment is to be raised above the new metal roof (mounted on a roof curb) the weight must be provided. Indicate if support framing is to be provided by MBCI.
- D. If you plan to frame over the equipment, for proper operation provide the distance required above each air-handling unit to the underside of our new metal roof.

4. Other things that you can provide that will be helpful to us?

The following will assist us in generating an Estimate.

- E. Digital photographs from on top of the existing roof and around the building taken from ground level. These can be e-mailed in JPEG format to your Regional Manager or Project Manager.
- F. Copies of “As Built” drawings that would describe the structural framework, details of construction and mechanical equipment locations are to be provided only if available.
- G. Provide a sketch, as mentioned, if a detail bid documents consisting of drawings and specifications have not been prepared. If they have been prepared, you may note the requested information on them or on a separate document.

OTHER CONSIDERATIONS TO ENSURE YOUR JOB IS DONE RIGHT

MBCI highly recommends you also consider the following, which MBCI does not provide services for:

- 1. Determine the type of anchorage system for securing the retrofit framing to the existing roof by performing anchor pullout tests. Note that many local fastener/anchor distributors provide this service. The anchorage system should be designed by a licensed engineer that has evaluated the existing roof system. MBCI will provide the necessary load data required for these evaluations to be performed.
- 2. Determine if the existing roof’s substrate and assembly has adequate compression resistance to withstand the positive downward acting loads that the retrofit framing system will induce. This requires performing compression resistance testing in the field. Speak with your local fastener/anchor distributor to see if they offer assistance.
- 3. Determine if the geometry of the new roof plan and layout will be governed by any stormwater retention or drainage restrictions.
- 4. Determine if there will be any removing and disposing of any existing roof gravel and ballast to help compensate for the added weight of the retrofit roof system. If so, be aware that this is sometimes controlled by governing environmental ordinances and regulations.

REQUESTING AN ESTIMATE: Your MBCI Regional Manager or Project Manager can assist you with the above information as well as provide you with the mentioned RFI form.