RAM

Innovative Design + Construction

Post Frame Buildings

Experience the **RAM Advantage**

The RAM Advantage:

We understand it can be a challenge to complete a project on your own, so when needed, RAM can provide the services required to complete a project from beginning to end.

Why RAM?

RAM employees are dedicated to the very best contractor experience. We take the time to listen, ask questions, and make sure that we understand your needs and expectations. Together we work as a client-contractor team to develop solutions to meet your individual goals and needs, while maintaining your budget and timeline.

Since 1999

RAM Buildings has offered post frame design-build construction specializing in agricultural, storage, equestrian, commercial, aircraft hangars, post frame living spaces. We excel in restoration and renovation of existing post frame buildings.

Since 2005

RAM General Contracting offers design-build construction, construction management, steel & post frame buildings, specialized large commercial/industrial projects, and is Minnesota's premier equestrian property developer.

Agricultural

Agricultural buildings play a vital role on your farm. Whether for beef, dairy, or storage, rest assured we have designed and constructed thousands of agricultural buildings.

Storage

Whether you need a garage or multiple storage units, RAM will customize a storage building just for you. We have plenty of options to beautify and personalize your building to meet your needs.

Equestrian

Equestrian facility designs are complex, requiring an intricate mix of functionality and quality, while maintaining a sense of class. RAM can help you make the right decisions for you and your budget.

Commercial/Industrial

We have the knowledge and experience to create a quality, low-cost, energy-efficient commercial or industrial building.

Aircraft Hangars

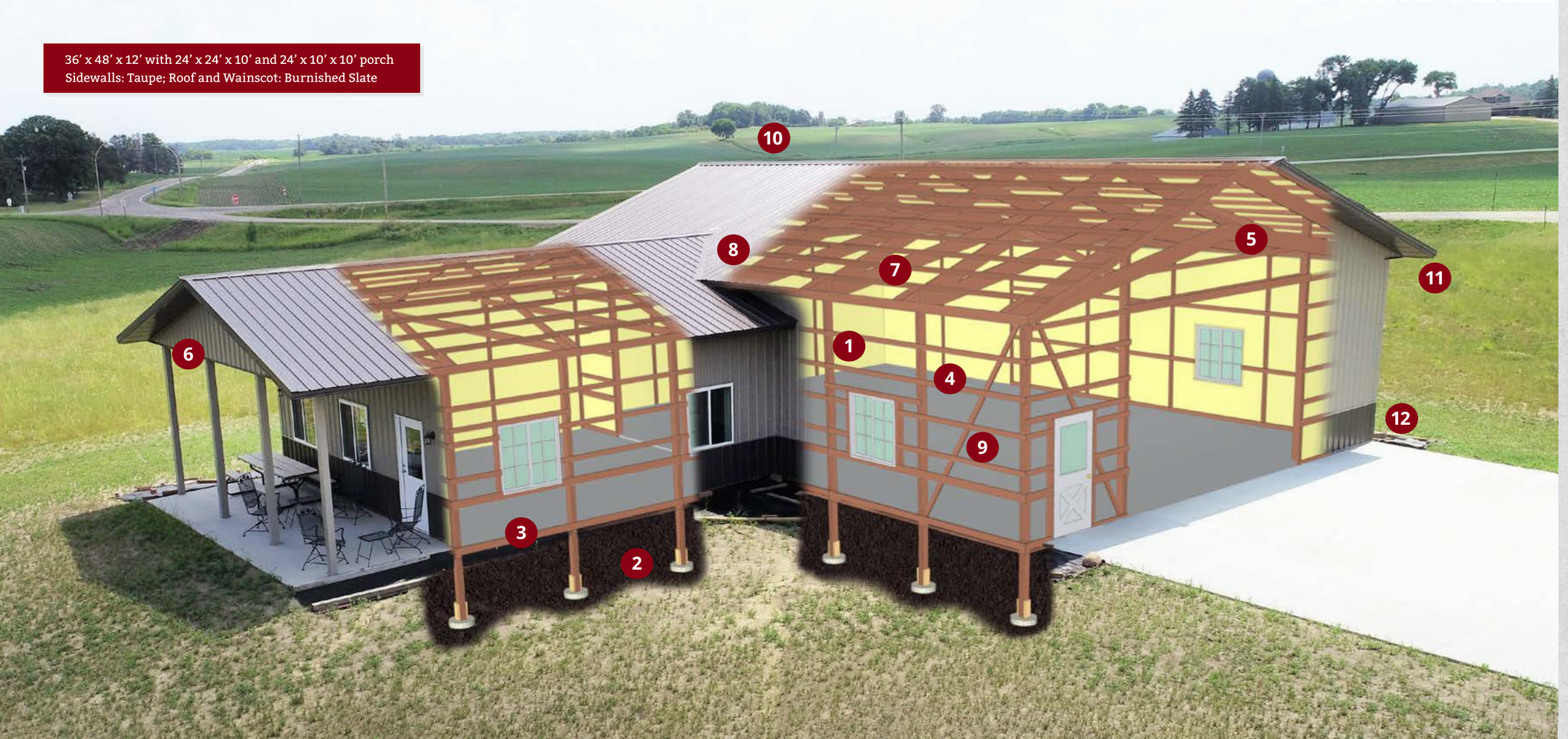
RAM uses only the best quality materials and installs them with highly trained professionals to construct a hangar that will be long-lasting, durable, and weather resistant.

Post-Frame Homes

There are savings when building a post-frame home versus a traditionally built home and our highly trained construction crews can make your dream home a reality.

Renovation and Restoration Services

Whether your post-frame building needs repairs from storm damage or you're looking to modify or expand, our experienced team is here to help. With expert knowledge in post frame construction, we ensure every project, big or small, is done right



Building Components

Basic Post Frame:

1. Columns
2. Concrete Footings and Uplift Blocks
3. Grade Board
4. Wall Girts
5. Roof Trusses with Vaulted Bottom Chord
6. Roof Trusses with Flat Bottom Chord
7. Roof Purlins
8. Valley
9. Diagonal Corner Bracing
10. Ridge Vent
11. Overhangs with Vented Soffit
12. Wainscot

Building Your Site

Important things to consider when choosing the right location for your new building:

- **Grading:** Will water shed away from the building?
- **Access:** Does the site allow for the delivery of building materials and heavy equipment?
- **Material Staging:** Where will the building materials be stored before and during construction?
  - Gravel is best. It helps keep the building materials clean and allows the crew to work through weather conditions that other base materials will not.
- **Building Position:** The placement of your new building on your property is both a functional and aesthetic decision that can be weighed using factors such as: will the building be parallel or perpendicular to an existing building, road or home.
- **Work Area:** The construction crew requires access to all sides and a level working space of 10’ around the perimeter of the building. Note: This area should be tapered after the building is erected during final grading.

The owner, excavator, and RAM Territory Manager must agree on the proposed location of the building.

Standard equipment and work area:

- Skid steer loader
- All terrain forklift
- Scissor lift
- Crew truck and trailer
- Dumpster
- Mini biff
- Building pad with 10’ all around
- Delivery material staging area
- Site entrance

Shaping the grade for your building pad so that the site does not retain water is a critical step in the building process.

72’ x 208’ x 18’

Building site for future 72’ x 72’ Building

Site Prep

RAM Buildings quotes the project assuming that the following site preparation conditions will be met.

Site work will need to be done before your building can be built. Additional costs can be incurred if these conditions are not met.

- The building site is accessible by heavy truck for delivery of building materials and equipment.
- RAM’s construction crew will have level 10’ around the outside perimeter on all sides and corners of the building, without obstruction.
- The building pad, including the 10’ working area around the building’s perimeter, will be level within 8”.
- Sand cannot be used in the top 6” of the building pad, nor the 10’ area around the building. Sandy soil will not support the equipment used to erect the building.

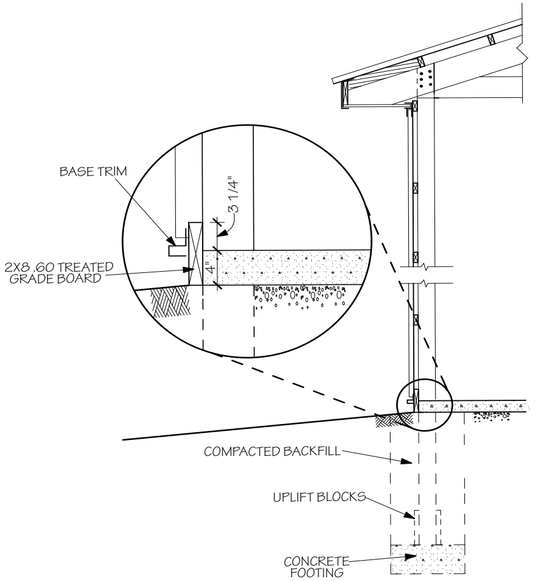
Understanding Finished Floor Height

Finished Floor (FF) is considered the location of the top of the concrete floor in the building. The FF height is always located at 4” up from the bottom of the 2x8 grade board.

The most important factor in determining FF is to ensure that water sheds away from the building. In some cases, it makes sense to match the floor height on an existing building on the property whether the building is connected or not.

It is critical that everyone involved in the project is on the same page for the FF so that there are no drainage issues and the building is constructed with the proper clearance.

The finished floor height should be marked on the side of a stake, side of a building, or even a fence post. It is recommended that the FF is marked in more than one location in case a stake is bumped or lost during the excavation or construction process. It is the responsibility of the excavator to mark the finished floor height because of their role in ensuring the water drains away from the building, and the amount of fill they have calculated to prepare for your finished floor.



FINISHED FLOOR (FF) DETAIL

Column Back Filling

Upon completion of the building, you will find in most cases that the holes we auger and backfill will settle after a good soaking and you will have areas of the building where you can see under the bottom of the grade board. This is normally corrected when the excavator or concrete finisher grades out the inside of the building to prepare for concrete or to FF height, if there is to be a dirt floor.

Final Grading and Landscaping

A very important step in the planning process

Putting the final touches to the sitework and landscaping of your new RAM Building should not be an afterthought. Discuss your options with your excavator, concrete finisher, or take some time to prepare a plan to wrap up the project yourself.

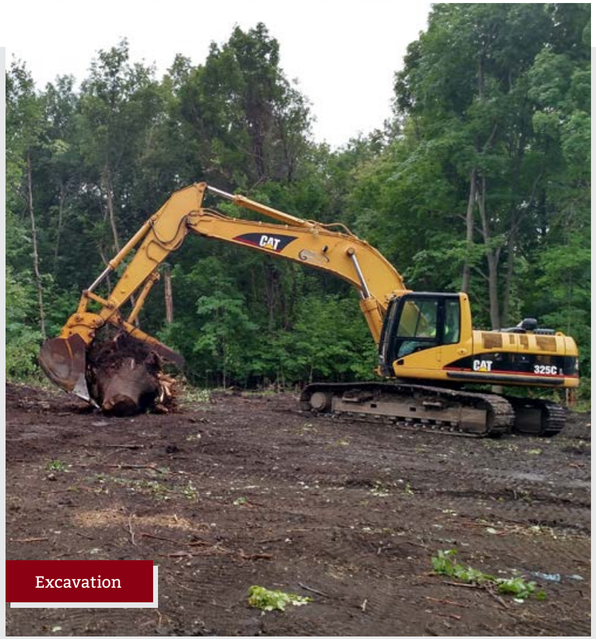
All four options below have pros and cons. Discuss with your Territory Manager if you have any questions.

RAM recommends a minimum slope of 1” for every 10’ or more away from the building. This applies to concrete, landscaping, and grading around the 15’ perimeter of the building.

Why Choose RAM?

We are here to help along the way. We can share our experience with the other construction steps that will be involved in your project. For our customers who want us to provide some, or all, of the services needed beginning to end such as excavation, concrete, electrical services, insulation, plumbing and heating, we can do that. We call this the RAM Advantage!

Our longstanding relationships with contractors in the other trades help us provide you with a top-notch building experience.



Excavation

Concrete pouring and finishing

Once Your Building Is Up, What's Next?

There is not a "one size fits all" sequence that completes every project, but here are some of the steps that may be necessary.

- Plumbing rough-ins are performed before a concrete floor is poured.
- The grading of the interior to prep for interior floor, and exterior grading, will have to be done.
- When a building is going to be insulated and lined, the concrete is poured and cured first.
- Electrical rough-ins are performed before the liner steel is installed unless you are using conduit.
- Surface mounted junction boxes and fixtures are installed over the liner steel for your electrical switches and lights.
- Plumbing fixtures and HVAC appliances are installed after wall finishes are installed.
- Overhead doors are installed after the ceiling has been installed, if the building is insulated and lined.
- Proper landscaping should always be done to prevent erosion around your building.

It can vary, but typically the sequence for your project will reveal itself as you work with the different trades or contractors, and they express what needs to be done before their work can be performed.


Electrical Rough In


16' Tall Ceiling

What to Expect in the Preconstruction Process:

1. A purchase agreement is signed based on a final building design and specifications, with downpayment.
2. An approximate start date is established.
3. The excavator should mark the building's finished floor height and stake a minimum of two corners.
4. If a building permit is required, construction drawings will be provided for you to use when you apply for the building permit.
5. After the building permit is obtained, a copy is provided to RAM for review for distribution to our team.
6. The site preparation can be performed after the building permit is obtained.
7. Construction drawings are finalized for RAM use.
8. RAM verifies the site is ready, the building corners are staked, and the finished floor height is located, at a minimum of 2 weeks prior to the scheduled start date.
9. The RAM Crew Manager will contact you to discuss the timing of deliveries and scope of the project.
10. Materials and equipment are delivered to the jobsite.
11. The crew begins construction.

Thank You!

With proper planning of the building's location, site preparation, and finished floor height, you will help keep the project on schedule and avoid additional costs. It sets your building crew up for success and can ensure your building is erected without affecting the quality.

We thank you for choosing RAM Buildings for your project, and we do not take that decision for granted. We will work hard to ensure you are a happy customer!

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