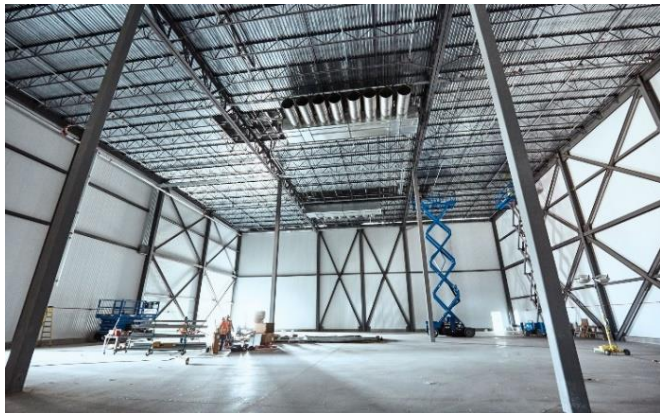


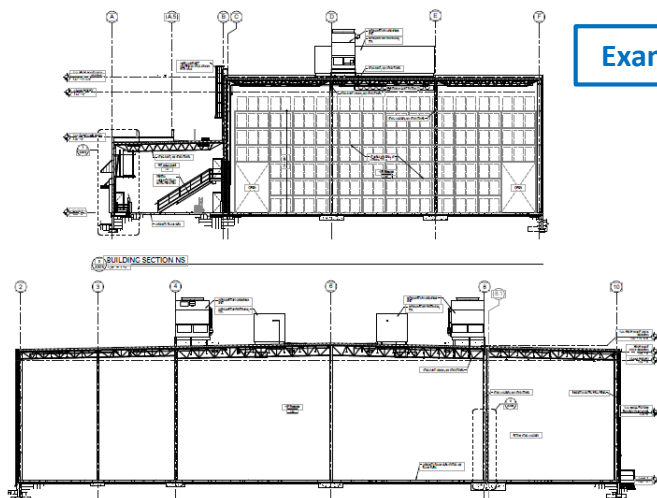


# The Power Of Low Charge Ammonia Systems

Reduce the construction costs of your cold storage building and provide the end-user with a lower cost of ownership by installing Evapcold Low Charge Ammonia Packages. Eliminate the machinery room, reduce the field electrical scope, eliminate or reduce roof supported pipe headers, stands and hangers, shorten your construction schedule and minimize your overall risk with the Evapcold family of products.



To take advantage of these lower building costs the architectural, structural, electrical and mechanical design team needs to incorporate the packaged solution into the building design early in the project development process. This will guarantee that the material take-offs and subcontractor bids are based on the associated reduction in building scopes and the cost savings are recognized by the General Contractor and passed on to the Owner. The design-build process, common in refrigerated facilities, lends itself to making these new cost saving improvements happen, but if the building is designed “the same old way” then they are harder to achieve.



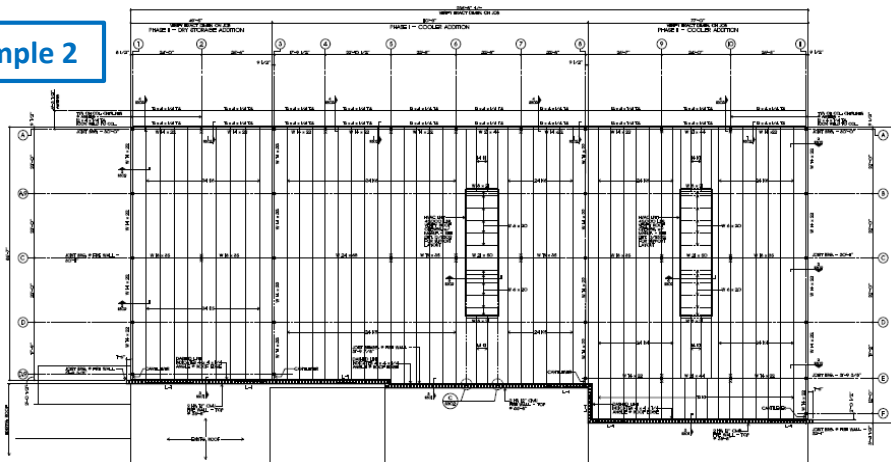
Example 1



Any additional structural steel needed for roof top packages is minimal if the structural designer incorporates it into the overall building design early in the design development as shown in project Example 1 and Example 2.



Example 2



Transform machine room space into revenue generating product storage, production or operations with Evapcold Low Charge Refrigeration (LCR) packages. They are also a great solution for “tight sites” because eliminating the machine room allows your building to be larger.

# Building A Better Design-Build Process



The General Contractor & Owner need to be aware that the following items will reduce the building cost estimate and bring savings to the project:

- Eliminating or reducing the size of the central machinery room and roof supports for ammonia pipe headers.
- Planning for the required roof steel will minimize any structural cost impact for the packaged units.
- Recognize the cost savings from the reduction in field electrical work because Evapcold units are prewired.
- Reduction in the GC's monthly "site general conditions" cost because the building construction schedule will be shorter.

The plug & play Evapcold design provides a shorter construction schedule because:

- Evapcold units can be manufactured & shipped in parallel with building steel fabrication and erection.
- Units have a very short installation time.
- Less on-site labor than field erected systems.
- Factory testing leads to quick & trouble free startup.
- Refrigeration no longer the project's critical path.

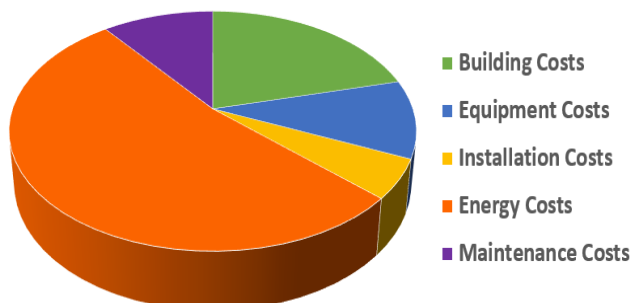


Evapcold family of Low Charge Refrigeration (LCR) products



Get rid of all the ammonia pipe headers, save your roof & lower you electric bill – all at the same time. The typical long piping headers associated with stick built ammonia systems lead to many problems. They create a lot of roof maintenance, cause mechanical integrity problems with piping & insulation and consume energy. Ammonia piping from central plants can run hundreds of feet across your roof or through your facility. These long runs also cause pressure drop and several degrees of temperature loss in a stick built system and consume 5% to 10% higher energy than the Evapcold packaged systems as a result. Evapcold units are installed locally at the cooling load, have no roof ammonia headers and as a result save energy due to negligible pressure and temperature losses. Less maintenance, better mechanical integrity and lower energy add up to **Lower Cost Of Ownership!**

Cost of Ownership



Evapcold provides a lower cost of ownership because:

- Lower building costs.
- Lower electric bills.
- Lower refrigerant costs.
- Lower regulatory & compliance costs.
- Clearly defined and easy to use Installation, Operation & Maintenance procedures.
- Consistent Evapcold system design & superior documentation simplifies training and unit operation.