

# **Success Story:**



Gaylord Specialty Healthcare serves people who need additional attention for complex or chronic medical issues and rehabilitation needs.

#### The Business Situation

Gaylord's long term energy strategy for its 330,000 sq-ft campus is to reduce reliance on imported #2 heating oil and to shrink its carbon footprint. The facility management team learned about the benefits of a solar hot water solution for satisfying its daily appetite for 12,000 gallons of domestic hot water. Top management supported the idea, which set the stage for the CT Clean Energy Finance And Investment Authority to fund two thirds of the \$550,000 project. Being part of a broader energy strategy satisfied the board of directors.

#### **The Client:**

Gaylord Hospital Gaylord Farm Road Wallingford, CT 06492 (203) 284-2800 www.gaylord.org

# **Solar Hot Water: Green Solution** for the Energy Strategy



"Any commercial user of large amounts of domestic hot water should consider the financial benefits of investing in solar thermal technology"

Jeff Lendroth, Munger Sustainable Energy Consultant

# The Challenge

This was unchartered territory for Gaylord so the risk was high. The grant timeframe that was elapsing imposed tight time constraints for remaining "grant eligible".

Four contiguous buildings required separate solar thermal installations. Each of the four roofs differed in construction, creating a challenge for the most efficient, secure and water tight attachments.

# **The Solution**

72 of the latest technology SolarUS evacuated tube solar hot water panel collector arrays were installed along with a 3750 gallon storage tank from which hot water is pumped throughout the campus.

# Sustainable Energy Solutions

Perfect Complement to the "Munger Green" Strategy



# **Munger's Role In This Project**

Munger was general contractor for the installation of solar thermal collectors. This included permitting, infrastructure concrete site work, roof structure and sealing, and mechanical assembly and installation of the solar arrays. Munger completed a solar panel infrastructure which enabled LMG, the prime contractor, to finish other tasks required to complete the job.

Munger applied its expertise in buildings and roofs to recommend the correct solution for each rooftop including a dunnage design that elevated the solar arrays 18-inches above the rooftop. This ensured adequate clearance for roof maintenance and repairs.

# **Sustainability Results**

#### **Economic, Environmental, Social**

Gaylord's is the largest commercial domestic hot water installation in Connecticut and the first hospital in the state to employ an alternate energy program.

The system satisfies two thirds of the domestic hot water needs. Although budgeted for an annual savings of 7,000 gallons of heating oil there is a savings potential up to 9,000 gallons.

This very attractive "big picture" success joins other Gaylord energy efficiency initiatives to enhance credibility with the board of directors relative to future sustainable energy initiatives.

"Munger made a strong impression on us. They get it right the first time around. Being customer focused with proactive suggestions, quality workmanship and available when needed is an unusual combination for a contractor".

Mark Vere, Gaylord Director Facility Support Services



#### **Teamwork Essential For Success**

"The key to this project's success was a great team effort", said David DeMaio, Munger president. "The project went seamlessly. Everyone had a strong sense of responsibility for their role".

- CES [Consulting Engineering Services] system design
- LMG [Legacy Mechanical Group] prime contractor, installation and maintenance
  - Munger teamed with LMG to ensure on-time completion in order to retain grant eligibility
  - Munger recommended modifications to SolarUS products that will enable more efficient future installations
- Munger sub-contractors:
  - Contractors Steel Supply Co-design the dunnage and support system
  - Quality Roofing Services seal and weld EPDM roof penetrations

# **Our Core Competency:**

**Building Long Lasting Relationships With Customers and Partners.** 

#### **We Add Value From Start to Finish:**

Convenience, Advice, Integration of High-quality Products, Design/Build Services, Support.

#### **No Shortcuts:**

Built to the Highest Structural Standards Without Compromising Integrity, Quality, Budget, Professionalism or Time.



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