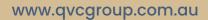
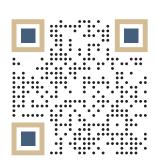


# ROCKHAMPTON SANDS

"Your local thermal & washed sands professionals"







## Your Trusted Partner in THERMAL SAND SUPPLY

As part of the QVC Group, Rockhampton Sands is a recognised specialist in the production and supply of high-quality Thermal Sand, purpose engineered for use in electrical cable trenching and critical infrastructure projects.

Our team understands that the success of major projects, particularly in the renewable energy, utilities, and civil construction sectors, depends not only on technical performance but on material consistency, reliability, and long-term durability. That's why we prioritise quality at every stage of our production process.

At Rockhampton Sands, we engage experienced industry professionals and technical advisors to oversee our thermal sand production and testing protocols. This ensures every load delivered meets or exceeds required thermal resistivity standards, giving our clients complete confidence in both product quality and performance longevity.

To further support seamless project delivery, Rockhampton Sands operates its own dedicated fleet of modern haulage vehicles, allowing us to provide reliable end-to-end service and reliable, on-time delivery across Central Queensland and beyond. This integrated approach makes us your one-stop, dependable partner for thermal sand supply—reducing risk, increasing efficiency, and delivering real value to your project.

When quality, consistency, and reliability matter, choose Rockhampton Sands—the experts in thermal sand solutions.





#### Thermal Sand in Electrical Cable Trenching

SUPPORTING RENEWABLE ENERGY INFRASTRUCTURE ACROSS CENTRAL QUEENSLAND

#### What is Thermal Sand?

Thermal Sand is a specially processed, fine-grained sand with low thermal resistivity; a critical property that allows for efficient heat dissipation from underground electrical cables. It is commonly used in cable trench backfill to encapsulate and protect high-voltage cables in both urban and large-scale infrastructure projects, including solar and wind farms.

### Why Thermal Sand Matters in Electrical Installations

In underground electrical systems, especially in renewable energy projects, managing heat generated by electrical current is vital. Excessive heat can degrade cable insulation, reduce transmission efficiency, and shorten the life of the asset.

Using a consistent, high-quality thermal sand ensures:

- · Effective heat dissipation
- · Improved electrical performance
- · Reduced risk of cable overheating
- · Longer asset life and reduced maintenance costs



### Key Benefits of Rockhampton Sands THERMAL SAND

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Allows heat to escape quickly from buried cables, maintaining safe operating temperatures.

#### **CONSISTENT GRADING**

Uniform particle size distribution ensures compactness and reduces air gaps that impede thermal transfer.

#### **CLEAN AND NON-CORROSIVE**

Free of organic matter and corrosive substances that could damage cable sheathing.

#### N ENVIRONMENTALLY RESPONSIBLE

Rockhampton Sands source and process our sands to meet strict environmental and sustainability standards, aligning with the values of the renewable energy sector.

### Thermal Sand in Renewable ENERGY PROJECTS



With the surge in solar and wind farm development across Central Queensland, demand for high-quality, consistent backfill materials like our Rockhampton Sands thermal sand has increased significantly.

Applications include:

- ✓ Solar farm underground cable trenching
- ✓ Wind turbine power distribution
- ✓ Utility-scale battery and inverter installations
- ✓ HV and LV conduit installations

Using consistent and quality thermal sand in these applications helps mitigate thermal risk, ensuring that energy infrastructure performs reliably and efficiently, even under peak loads.

#### Importance of Thermal

#### **RESISTIVITY TESTING**

The effectiveness of thermal sand is validated through thermal resistivity testing, typically measured in °C·cm/W.

- Typical target value: ≤90°C·cm/W (or as per project specification)
- Testing ensures our sand meets design and compliance requirements for safe cable operation.

Accurate thermal resistivity results are crucial—especially in large-scale renewable energy projects where cable loads are high and operational efficiency is non negotiable.

Image 1 – Typical results from one of our sources (note 0.61 TR score)

Thermal Conductivity [ASTM D5334]						
Preparation Method	Spec ID	Moisture Content (%)	Thermal Conductivity (W/m·K)	Test Time (Sec)	Initial Temp (°C)	Thermal Resistivity (°C·cm/W)
Target Compaction 95% of MDD 100% of OMC	А	7.71	600	18.67	3.30	3.30
Achieved compaction 95.3%		0.00	600	20.59	1.65	0.61

### Available throughout CENTRAL QUEENSLAND

Our locally sourced and tested thermal sand is available for delivery throughout Central Queensland, including major renewable energy project zones.

- · Bulk supply & delivery options available
- · Third-party tested and certified
- Custom supply solutions



Enquiries & Orders

To request a specification sheet, test results, or pricing, contact:



#### **GET IN TOUCH**



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