

DIMENSION STONE

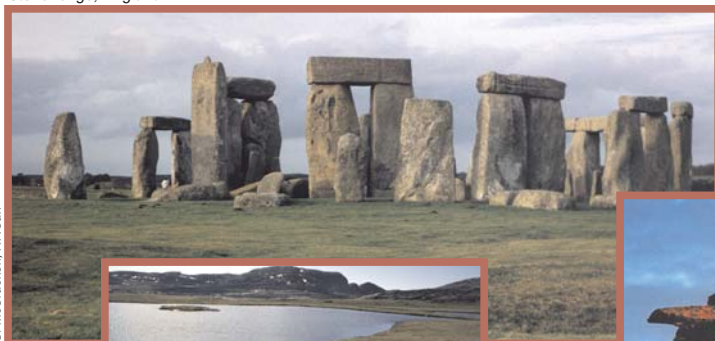


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Rocks from Another Dimension?

Dimension (or architectural) stone is any naturally occurring rock that is quarried, cut, and finished for use in construction or as decoration. Almost every type of rock can be and has been used as dimension stone, but the most common types are sedimentary rocks such as limestone and sandstone, igneous rocks such as granite and anorthosite, and metamorphic rocks such as marble and slate. Some stone is very attractive and is used for ornamental purposes such as monuments and tombstones.

Stonehenge, England

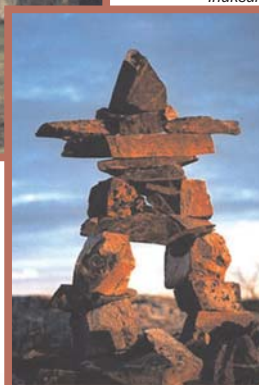


S. McCracken, NRCCan



Thule winter house, reconstructed, Baffin Island, Nunavut

© Robert W. Parks, University of Waterloo



Inuksuk

GSC 2007-025

Rock of Ages

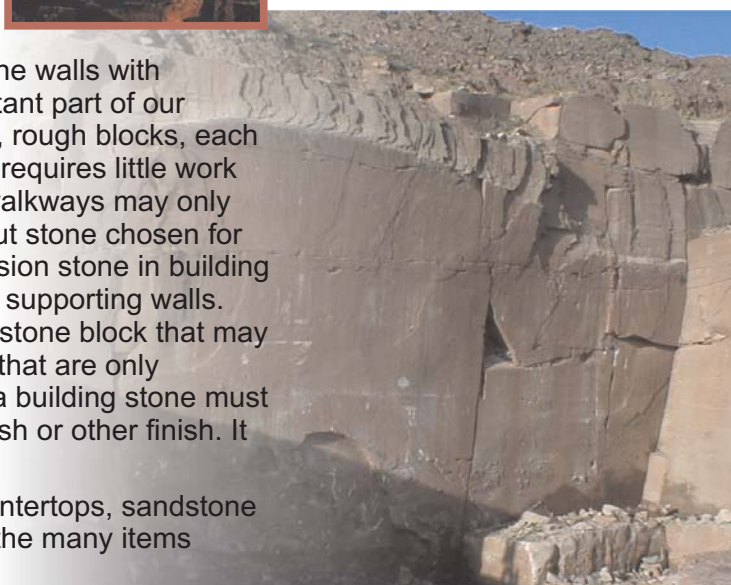
Stone has been used as a building material for thousands of years because it is easily available, strong, and resistant to fire and the wearing effects of time and the elements. Many ancient stone structures are still standing today.

Flagstone floors have been found in stone houses of the Thule Inuit in northern Canada, and the Inuksuk, which has become a symbol of the North, is made of stone.

Looking Good . . . Rocks!

Modern building construction has replaced stone walls with concrete and steel, but rocks are still an important part of our buildings. Dimension stone is quarried in large, rough blocks, each of which can weigh many tonnes. Some stone requires little work before being used – stone for use in walls or walkways may only need to be roughly shaped with a hammer – but stone chosen for other uses may need more processing. Dimension stone in building construction is used as facing or cladding over supporting walls. Stonecutting tools and techniques allow a raw stone block that may weigh up to 20 tonnes to be sliced into panels that are only centimetres thick! In addition to looking good, a building stone must be easy to work with and be able to take a polish or other finish. It must not crack, crumble, or weather easily.

Marble sinks, granite floor tiles, soapstone countertops, sandstone walkways, even slate pool-tables are a few of the many items made of dimension stone today.



Wallace sandstone, Wallace Quarries, Wallace, Nova Scotia

© Wallace Quarries Ltd.

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Is it Easy to Find?

Although there is no shortage of rocks in Canada, most are not suitable to use as dimension stone: they are too fractured, too weathered, too inconsistent in their texture, or just plain ugly. Most of the dimension stone produced in Canada is granite, limestone,

marble, labradorite, sandstone, and slate. Manitoba is the only producer of Tyndall Stone (mottled limestone), and Canada's only producing slate quarry is in eastern Newfoundland.



● Dimension stone quarries

Tyndall Stone



© G. Young, Manitoba Museum



Manitoba's Legislative Building, made of Tyndall Stone, Winnipeg, Manitoba

S. McCracken, NRCan

Grotesque 'Thinker', Parliament Hill, Ottawa, Ontario



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Peace Tower, Ottawa, Ontario

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Our Parliament Rocks!

The Peace Tower in the Parliament Buildings in Ottawa is named to honour the thousands of Canadian soldiers who died during World War I in service to their country. The rocks chosen for the Memorial Chamber of the Peace Tower are full of symbolism. The floor is made of stones taken from the World War I battlegrounds where Canadian soldiers fought. The walls and columns are faced with stone from France and Belgium, the countries where Canadian soldiers saw the most combat. The central Altar is carved from the same British stone used for the tombstones in military cemeteries.

There are many figures and carvings, most of Wallace sandstone, in the Peace Tower and many blocks of stone waiting to be carved in the interior of the Centre Block. The Parliament Buildings are the only federal buildings in North America where stone carving is still taking place on a full-time basis.