



Photo: Barbara McMullen

Opened in 1903, the MacDonald Institute building in Guelph, Ontario is richly ornamented with unglazed terra cotta elements.

*Le bâtiment de l'Institut MacDonald de Guelph (Ontario) est richement décoré d'éléments en terracotta non vitrifiée.*

# Canada's Terra Cotta Architecture

## An Invisible, Handcrafted Legacy

The words are Italian, but the legacy reflects Canadian skills and values. Terra cotta (literally “baked earth”) appears on some of Canada’s finest late 19th- and early 20th-century buildings. Yet, because it so often imitated stone, its existence today is invisible to most Canadians.

by Barbara McMullen



The Confederation Building in Winnipeg is entirely clad in a brilliant white glazed terra cotta, including the lavish cornice.

*L'immeuble de la Confédération de Winnipeg est entièrement recouvert de brillante terracotta blanche vitrifiée, y compris la somptueuse corniche.*

## Manufacture

With the exception of some stock items that could be purchased from pattern catalogues, the terra cotta design process originated in the architect's office with the prepa-

ration of full-size drawings of all ornament. The drawings were then sent to the terra cotta manufacturer, where a highly skilled modeller sculpted a clay model to the archi-

## History

Architectural terra cotta is a clay product used to decorate or clad building surfaces. One of the world's oldest building materials, it was used in ancient civilizations as early as 3,200 B.C. Terra cotta's later use with brick in northern Italy during the 14th and 15th centuries significantly influenced its late 19th- and early 20th-century use and manufacture in England, the United States and Canada.

Canada's earliest known use of architectural terra cotta was on the Nelson Monument (1808-09) in Cartier Square, Montréal.

Coade Stone, a type of terra cotta, was used in both the figure of Nelson and the relief plaques at the base of the column. After withstanding some of Canada's worst weather for 170 years, the original figure of Nelson was replaced in 1981 with a fibreglass copy.

Coade Stone (made in England from 1769 to 1839) was an early precursor to terra cotta's main period of manufacture and use in England beginning in the 1860s. Although

terra cotta was made in the U.S. as early as 1849, its widespread use there didn't get under way for another two decades. Terra cotta's heyday in Canada began shortly thereafter, in the late 1880s. Its use in all three countries declined in the 1930s, mainly due to the impact of the Depression.

skilled hand craftsmanship involved in its making and the plasticity of the clay, which permitted easy modelling. In its use as ornament, terra cotta's added advantages included its retention of sharp details, as well as its lighter weight and lower cost when compared with carved stone. Terra cotta was also fire-resistant and, when properly made, installed and maintained, highly durable.

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## Advantages

It's no accident that terra cotta's period of greatest popularity in England coincided with the Victorians' love for ornamentation. Its decorative possibilities were nearly endless.

Appearing in a wide range of shapes, textures and colours, terra cotta was an extremely versatile building material. Its remarkable beauty—which exceeds that of all other materials—was attributable to both the

## Types

There are three types of terra cotta: unglazed, glazed, and porous. So-called porous terra cotta was made in both Ontario and Quebec, and was often used in commercial buildings as fireproof protection for structural steel and to construct partitions, floors and arches. The focus here is on unglazed and glazed architectural terra cotta.

tect's specifications. Next, the clay mixture was carefully hand-pressed into a plaster-of-Paris mould made directly from the approved clay model. Once the unit had dried,

the mould was removed. After applying either a slip (clay and water) or a glaze, it was fired in a muffle kiln at a high temperature for several days.

## Unglazed Terra Cotta

Unglazed terra cotta has often been confused with carved sandstone. Terra cotta's crisp details as well as its small units—which at times fit together like a puzzle—are important clues to its identity.

In Canada, unglazed terra cotta appeared predominantly in red. Along with matching pressed brick, it was used mainly as exterior ornament on residential, commercial and public buildings during the 1880s and 1890s. Red terra cotta panels and stringcourses often embellished fine Ontario Queen Anne Revival houses during this period. A good example is Toronto's 1890 Matthews Residence (today known as the Newman Centre).

Most of the unglazed terra cotta used in Canada was made between 1886 and 1906 by several largely unrecognized pressed brick and terra cotta manufacturers in Ontario.

Numerous highly skilled terra cotta workers were involved in the Ontario industry. However, three distinguished individuals stand out: Thomas McLeod Clark of Ottawa, and Michael John Hynes and Walter Seymour Allward, both of Toronto.

T. M. Clark, who came to Canada from Scotland, obtained the earliest known patent for architectural terra cotta in Ontario in 1876. Clark's New

Edinburgh Brick & Terra Cotta Works, located on the McKay Estate in Ottawa, relied on an extensive deposit of marl located near Hemlock (McKay) Lake. The shell marl, when mixed with clay, gave his unglazed terra cotta a white, cream-coloured, or pink appearance, distinguishing it from the predominantly reddish-brown material made elsewhere in Ontario.

Clark's large cream-coloured decorative panels on Ottawa's Cartier Square Drill Hall (1879), an impressive Italianate building designed by Thomas Seaton Scott, Canada's first chief architect, are the earliest known architectural terra cotta both made and used in Ontario.

M. J. Hynes, an accomplished artist who had worked in both plaster and terra cotta, owned the Canadian Terra Cotta Co. in Toronto with his brother, William. Michael Hynes was also the artist and manager of the Rathbun Co. Terra Cotta Works in Deseronto, Ontario from 1892 to 1898. An outspoken, impassioned advocate for the use and manufacture of architectural terra cotta in Canada, Hynes presented a scholarly paper on his favourite subject to the Ontario Association of Architects at their annual meeting in Toronto in 1899.

Canada's renowned sculptor of the Vimy Memorial in France, Walter

Seymour Allward, was also employed as a terra cotta modeller at Toronto's Don Valley Pressed Brick Works in 1894.

The Perth County Court House in Stratford (1885-87) was the first major public building in central Canada to be decorated with extensive amounts of unglazed decorative terra cotta. The material appears in a large, elaborate high-relief pediment in the main gable, in six large allegorical panels (representing the arts, manufacture, justice, agriculture and architecture) and in numerous other panels and roundels.

The terra cotta on the Perth County Court House was made in the United States.

The signature of Professor H. Plasschaert, who taught terra cotta modelling during the 1890s at the University of Pennsylvania and the Philadelphia Industrial School of Arts, appears on the arts panel.

London, Ontario architect-artist George Durand designed the Court House using an eclectic mix of Richardsonian Romanesque, Queen Anne and Italianate features expressed in a rich combination of plum-coloured Credit Valley sandstone, yellow brick, red terra cotta and slate. Durand's signature appears on the architecture panel.

## Ontario's Main Brick and Terra Cotta Manufacturers

- Canadian Terra Cotta Co., Toronto (a.k.a. Hynes Terra Cotta & Brick Co.)
- Don Valley Pressed Brick Works, Toronto
- Milton Pressed Brick Co., Milton
- New Edinburgh Brick & Terra Cotta Works, Ottawa
- Ontario Terra Cotta & Pressed Brick Co., Milton
- Rathbun Co. Terra Cotta Works, Deseronto
- Toronto Pressed Brick & Terra Cotta Co., Milton

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Photo: Barbara McMullen

A hood mould with grotesques in unglazed terra cotta surrounds a window of the former Ontario Bank (1894) in Kingston, Ontario.

*Un larmier orné de marmousets en terracotta non vitrifiée entoure une fenêtre de l'ancienne Banque de l'Ontario (1894) à Kingston (Ontario).*



The glazed terra cotta exterior of the former Trusts & Guarantee Building (1914) in Brantford, Ontario include large elaborate caryatids supporting a heavy entablature giving weight to an otherwise small building.

*L'extérieur en terracotta vitrifiée de l'ancien immeuble Trust & Guarantee (1914) de Brantford (Ontario) comprend de grandes caryatides ouvrees soutenant un lourd entablement, ce qui donne une allure massive à un bâtiment par ailleurs petit.*



## Glazed Terra Cotta

Glazed terra cotta was used in Canada from 1898 to the 1930s mainly on commercial architecture, including many of Canada's first tall buildings. Appearing primarily in monochromatic shades of white, cream or grey, it was used in ornamented cornices, friezes, panels, pilasters, capitals and other decorative features, as well as plain cladding of the main exterior façade.

The earliest known use of glazed terra cotta in central Canada was on the John Kay & Son Store (1898) in Toronto. It appears in both elaborate Renaissance Revival ornament and as plain cladding. Designed by Toronto architect Samuel G. Curry, the façade of the building was relocated from King Street West to the north side of Adelaide Street West in the 1980s as part of the Scotia Plaza development.

Glazed terra cotta's invisibility in Canada can be explained by its frequent imitation of stone. After about 1913 more complex glazes became available to even more successfully replicate the texture and appearance of granite and limestone.

The more colourful polychrome terra cotta (units coated with a coloured glaze) was produced and used in England in the 1880s, and in the U.S. around the turn of the century. Although it started to appear in the U.S. more often after about 1910, the monochromatic shades of white glazed terra cotta remained more popular. Polychrome terra cotta's use in Canada was rare. It appeared as

decorative features along with white or cream-coloured glazed terra cotta on a limited number of commercial buildings.

Toronto's Ryrie Building (1891, 1913-14), decorated with blue-green glazed medallions situated between red unglazed terra cotta window surrounds, and the façade of Ottawa's restored former Bowles Lunch Building (circa 1916), with its rich cobalt blue and cream-coloured glazed ornament, serve as two of the few surviving examples of polychrome terra cotta in central Canada.

All the glazed architectural terra cotta used in Canada was made in and imported from England or the U.S. Today, only two major manufacturers remain in the U.S.: the Boston Valley Terra Cotta Co. in Orchard Park, New York (near Buffalo), and the Gladding, McBean Co. in Lincoln, California (near Sacramento). Both firms have been involved in Canadian restoration projects in recent years.

## Winnipeg Exchange District

Winnipeg's Exchange District, a national historic site, contains the largest and arguably the finest collection of glazed terra cotta buildings in Canada. Its extensive use in Winnipeg is attributable to several factors, including the timing of the city's explosive growth, its excellent rail links with American cities and the influence of Winnipeg architect John Atchison, who had trained in Chicago.

The detail that was achieved using glazed terra cotta is evident in the close-up of one of the caryatids adorning the former Trust & Guarantee Building.

*Le niveau de détail possible avec la terracotta vitrifiée est évident dans ce gros plan d'une des caryatides ornant l'ancien immeuble Trust & Guarantee.*



In Canada, Toronto architects Darling & Pearson led the way in the use of glazed terra cotta on tall financial or office buildings with their design of the former Union Bank (1903-04). It was used successfully to mimic smooth grey stone on the lower two storeys, on the attic, as quoins and as ornament around the windows.

Polychrome terra cotta was used a little more frequently in Winnipeg. One example is the gold and marbled-pink fragment “serpent panel” from the demolished Crescent Furniture Building (1918) which was incorporated into new construction.

## Reflection of Canadian Values

American and English trends influenced the design of Canadian architecture, including its terra cotta buildings. A number of Canadian architects who liked to use terra cotta, such as John Atchison, Frank Darling, George Durand, J. C. B. Horwood, E. J. Lennox, the Maxwell Brothers, had at one time trained or worked in the U.S. or England.

Much of Canada’s glazed terra cotta architecture, however, reflects Canadian values. At the turn of the twentieth century, many Ontario architects were rejecting what *The Canadian Architect and Builder* described as the “excessively tall” buildings in the U.S. with their “extravagant ornament and heavy



Fragment of a glazed polychrome panel from the Crescent Furniture Building (1918), now demolished.

*Fragment d'un panneau polychrome vitrifié du bâtiment Crescent Furniture (1918), aujourd'hui démoli.*

**Photo:** Courtesy of William Hurst

cornices.” Influenced by the views of McGill University’s dean of architecture, Stewart Capper, who had recently arrived from Scotland, Canada’s glazed terra cotta architecture is often characterized by simpler cornices, less elaborate use of ornament, and lower building heights than its New York and Chicago counterparts.

Canada’s glazed terra cotta ornament generally reflects Classical motifs. At times it displayed Canadian content, such as on the former Whalen Building (1913) in Thunder Bay, which features the coats of arms of nine provinces and eight heads representing the country’s early settlers.

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## Summary

Canada’s terra cotta architecture is a unique handcrafted legacy to be treasured for future generations. Its continued existence will require careful maintenance (see “Repairing Architectural Terra Cotta: The Decorative Clay,” in *Héritage*, 2005).

As seen recently in the case of Hamilton’s threatened Lister Block, the future of terra cotta clearly depends on the continued vigilance of heritage advocates along with a strong commitment to heritage designations by all levels of government. At times, financial assistance will also be required.

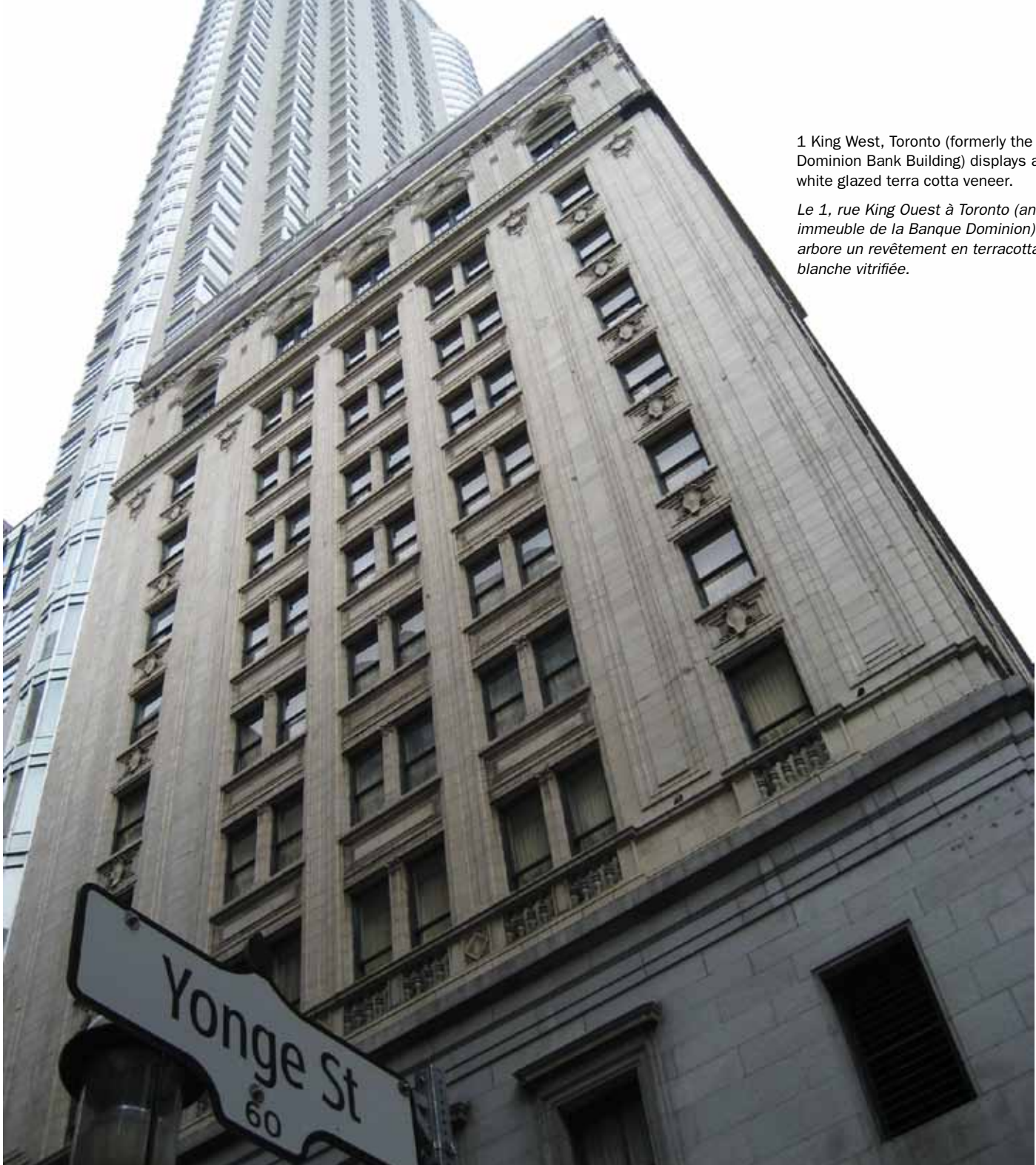


## The Lister Building— One of Hamilton’s Terra Cotta Gems

White glazed terra cotta pilaster on the Lister Building in Hamilton, Ontario.

*Pilastre en terracotta blanche vitrifiée de l'immeuble Lister à Hamilton (Ontario).*

A prominent downtown landmark anchoring the corner of James and King William streets, the Lister Building was once the hub of Hamilton’s retail activity. It is the city’s oldest remaining major retail and office complex with a large interior two-level shopping arcade. Built in 1923-24, its doors closed in 1995, and the building has remained vacant since.



1 King West, Toronto (formerly the Dominion Bank Building) displays a white glazed terra cotta veneer.

*Le 1, rue King Ouest à Toronto (ancien immeuble de la Banque Dominion) arbore un revêtement en terracotta blanche vitrifiée.*

Photo : N14hamilton

What is still visible on the outside of the six-storey landmark is the decorative use of white glazed terra cotta. The prominent two-storey base includes white fluted terra cotta pilasters between wide retail display windows. A classical terra cotta entablature with decorative medallions and the arcade entrance details on both street frontages separate the

base from the dark red brick mid-section. The building is crowned with a distinctive and elaborate white glazed terra cotta cornice.

The terra cotta elements (supplied by the Federal Terra Cotta Co. of New York) and the interior two-storey arcade are included in the building's designated heritage features.

The Lister Block was included on

the Heritage Canada Foundation's 2006 Top Ten Endangered Places List and has come close to demolition. A possible development solution for the site is under way which would include the cleaning, repair and reuse wherever possible of the existing terra cotta. The owner must obtain the heritage and building permits by June 30, 2009.