Designed by Brian Brooks of the architectural firm Webb, Zerafa, Menkes, the building has a tiered structure designed to evoke strength, history and a bond with past civilizations. Its four towers covered in granite aggregate provide some 56 000 metres of office space and are connected by an enclosed glass lobby. In 1998, the Building Owners' and Managers' Association named this the best government building in Canada.

Some 3000 civil servants work out of the Lester B. Pearson Building. They manage Canada's external relations with other countries, bilaterally and through international organizations such as the United Nations, the North Atlantic Treaty Organization, the Commonwealth, La Francophonie, the G-8, and the Organization of American States. But a very important part of their work is promoting international trade and investment, and helping Canadian businesses to market their goods and services in other countries. They are also the hub of an extensive network of about 4000 employees, including locally engaged staff, at some 125 Canadian missions around the world, who provide assistance of all kinds to Canadians travelling or living abroad.

The Lester B. Pearson Building houses offices, boardrooms, a conference room and auditorium, and a library. Displayed in it are contemporary works of art that reflect the vigour and diversity of Canadian culture. Many pieces were commissioned specifically for the building by gallery or museum professionals; they were chosen to enrich and complement the building's spaces while maintaining an atmosphere of elegance and simplicity.