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MAINTENANCE AND DESIGN CONSIDERATION FOR
PRECAST PANEL SYSTEM FOR RESIDENTIAL APARTMENT

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CHAPTER ONE ; INTRODUCTION

1.1 Introduction

Architectural precast concrete has been used since the early twentieth century and came into wide use in the 1960s. The exterior surface of precast concrete can vary from an exposed aggregate finish that is highly ornamental to a form face finish that is similar to cast-in-place. Some precast panels act as column covers while others extend over several floors in height and incorporate window openings.

In most cases, the architect selects the cladding material for appearance, provides details for weatherproofing, and specifies performance criteria. The structural engineer designs the structure to hold the cladding, designates connection points, and evaluates the effects of structural movement on the cladding. The precast concrete manufacturer designs the cladding for the specified loads, erection loads, connection details, and provides for the weatherproofing, performance and durability of the cladding itself.