

# High-Rise Precast/Prestressed Concrete Structures

- Design and Construction of Precast Concrete Braced Buildings in California -

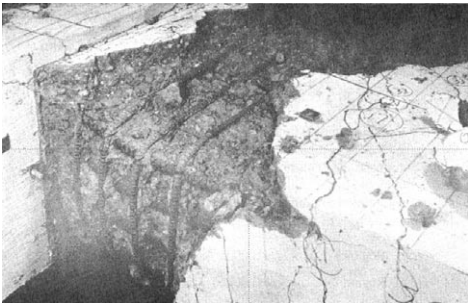
일시 : 2004년 4월 27일 PM12:30-17:40  
 장소 : 동국대학교 90주년기념 학술관 1층 예술극장  
 주최 : KPC연구회  
 주관 : 사단법인 한국지진공학회  
 후원 : LG건설(주), 우림산업개발(주), 대림산업(주), (주)대우건설, (주)공간종합건축사사무소

프로그램

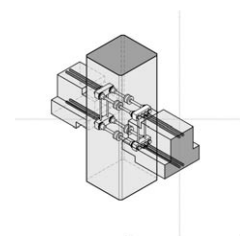
시 간	행 사 내 용	진 행
13:00-13:15	Opening Address	신성우
13:15-14:15	The Development of Seismic Resistant Precast Concrete Ductile Frames in California	Englekirk
14:15-14:30	Question and Answer	김종수
14:45-15:45	The Design and Construction of the : \$750M Hollywood Highland Project(DDC System) : 39-Story Paramount Apartment Building(Hybrid Beam System)	Englekirk
15:45-16:00	Question and Answer	김종수
16:15-17:15	New Ideas - an Evolving Technology Presentation of Proposed Design and Concepts	Englekirk
17:15-17:30	Question and Answer, and Closing Address	김종수

## The Development of Seismic Resistant Precast Concrete Ductile Frames

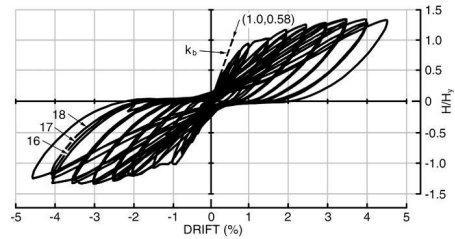
1. 기존의 RC구조물의 접합부 실험결과 - Excellent Performance But Hard to Sell



2. 새로운 접합부 - Precast Concrete 사용  
 - 외장재 + 내진보강재  
 - 공기단축



### 3. 초기모델의 시험결과



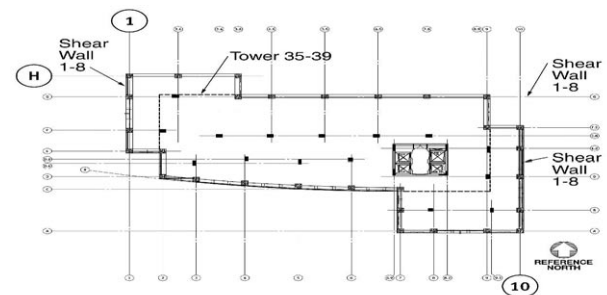
## 39-Story Paramount Apartment Building(Hybrid Beam System)

### 1. Paramount Apartment

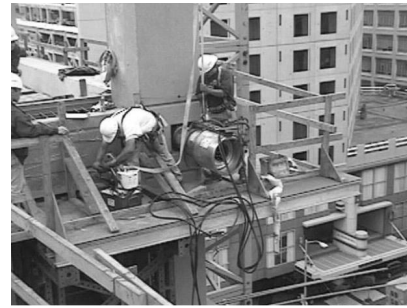
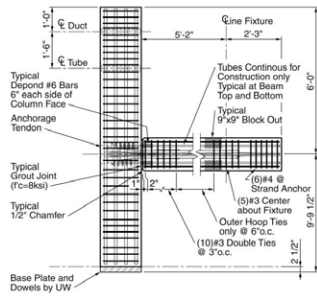
Tallest concrete building in Seismic Zone 4.  
 First precast concrete frame braced building - Seismic Zone 4.  
 First use of post-tensioning in ductile frame.  
 First use of steel with yield strength greater than 60 ksi in a ductile frame.  
 Post-tensioned Mat Foundation.



### 2. 평면



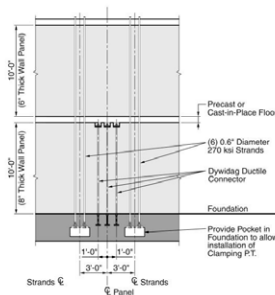
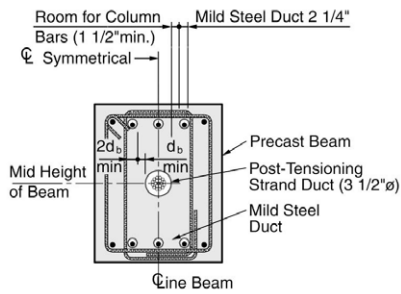
### 3. Test Subassembly



### New Ideas

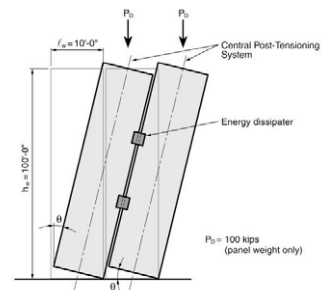
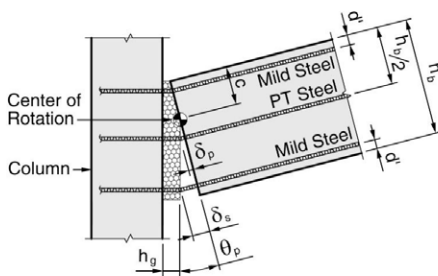
#### 1. Precast wall assembly

### 4. Hybrid Beam Section(Post-tension + Mild Steel Reinforcing)



#### 2. Vertically Connected Panels

### 5. Behavior Difference



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### 6. Exterior Column Condition

