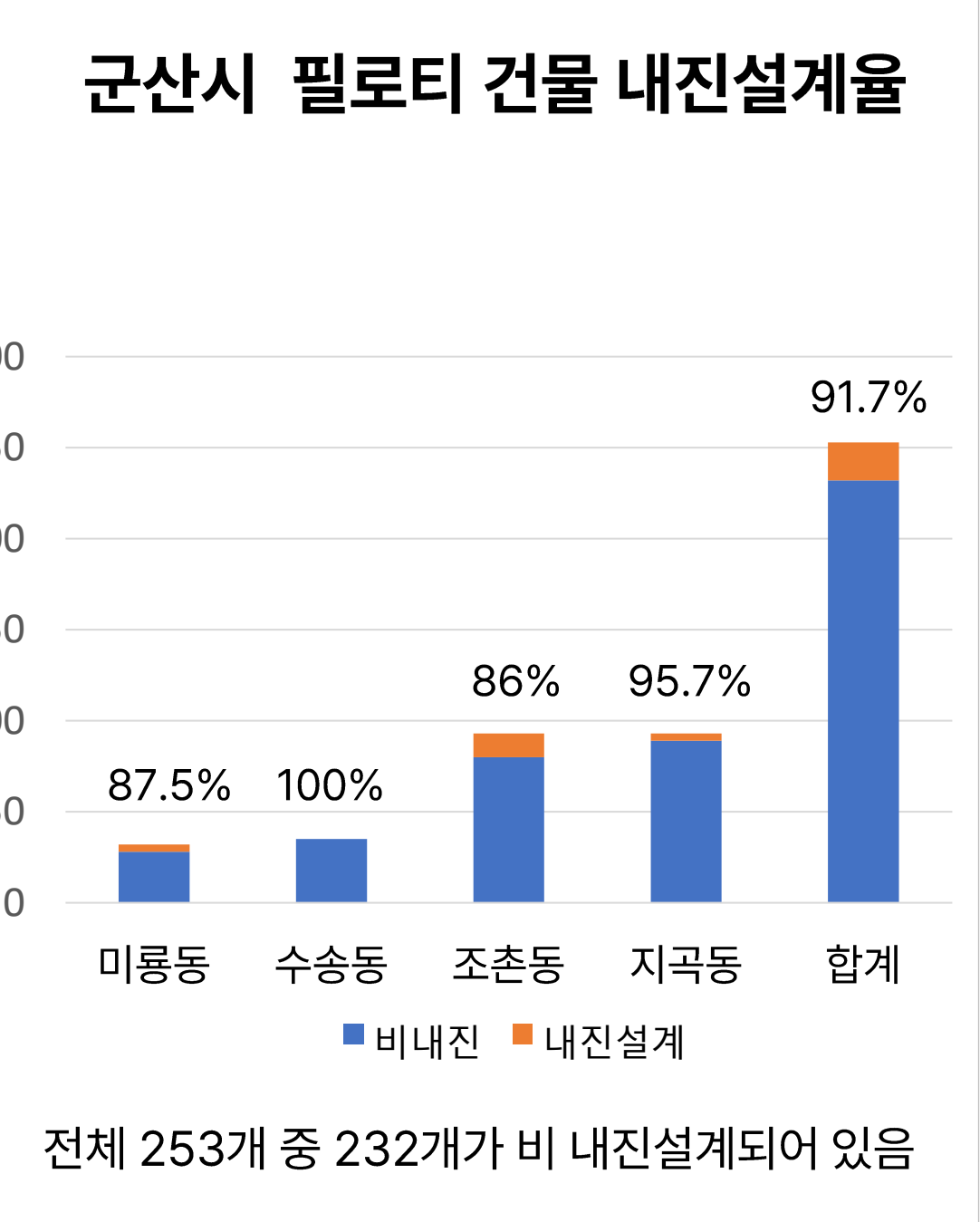
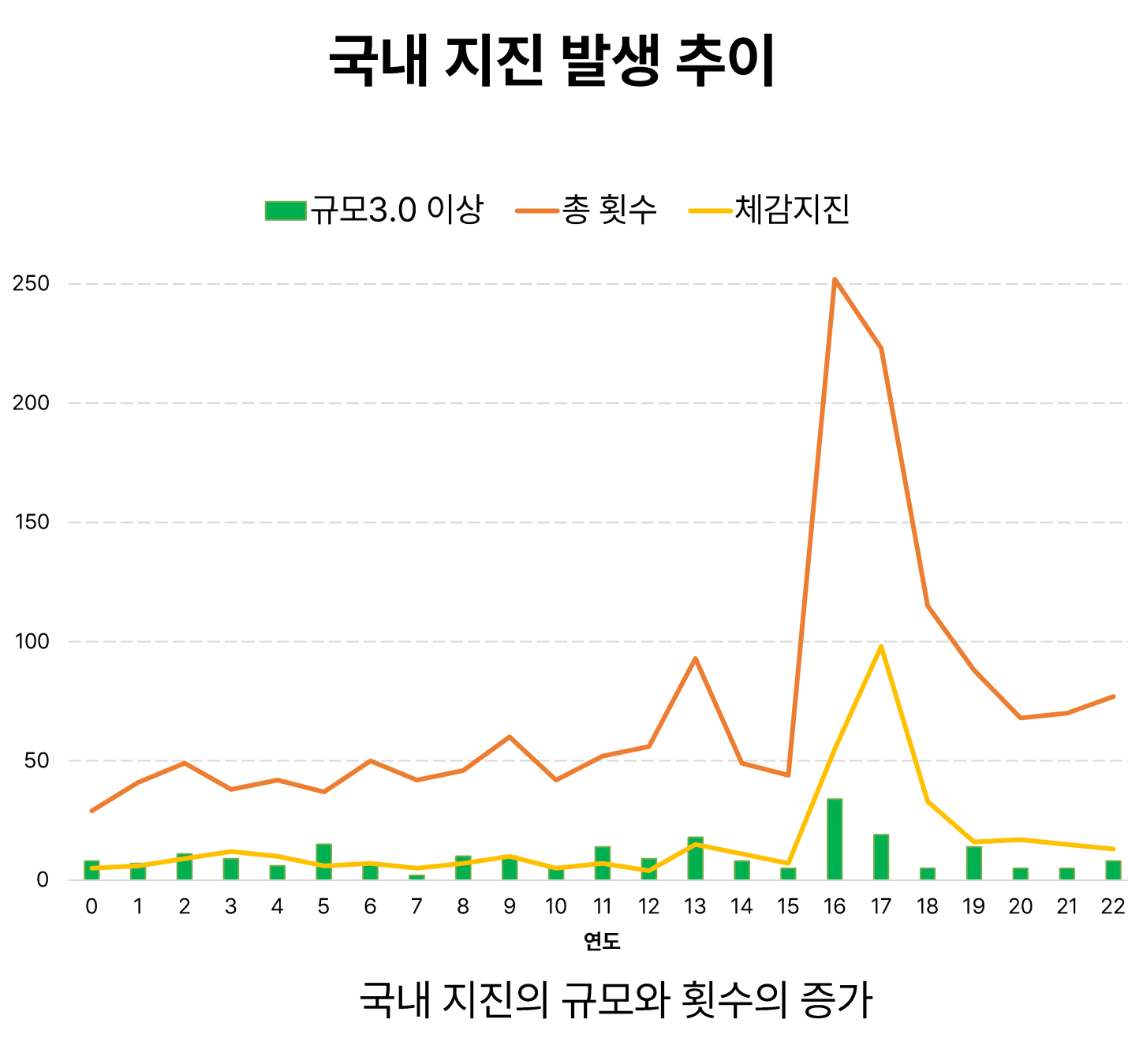


# 저층 필로티 건물의 내진보강

## Seismic Retrofitting of Low-rise Piloti Building

잡도리  
1801677 윤찬호  
1801693 장태수  
1801661 박현권

### 배경



### 건물 정보

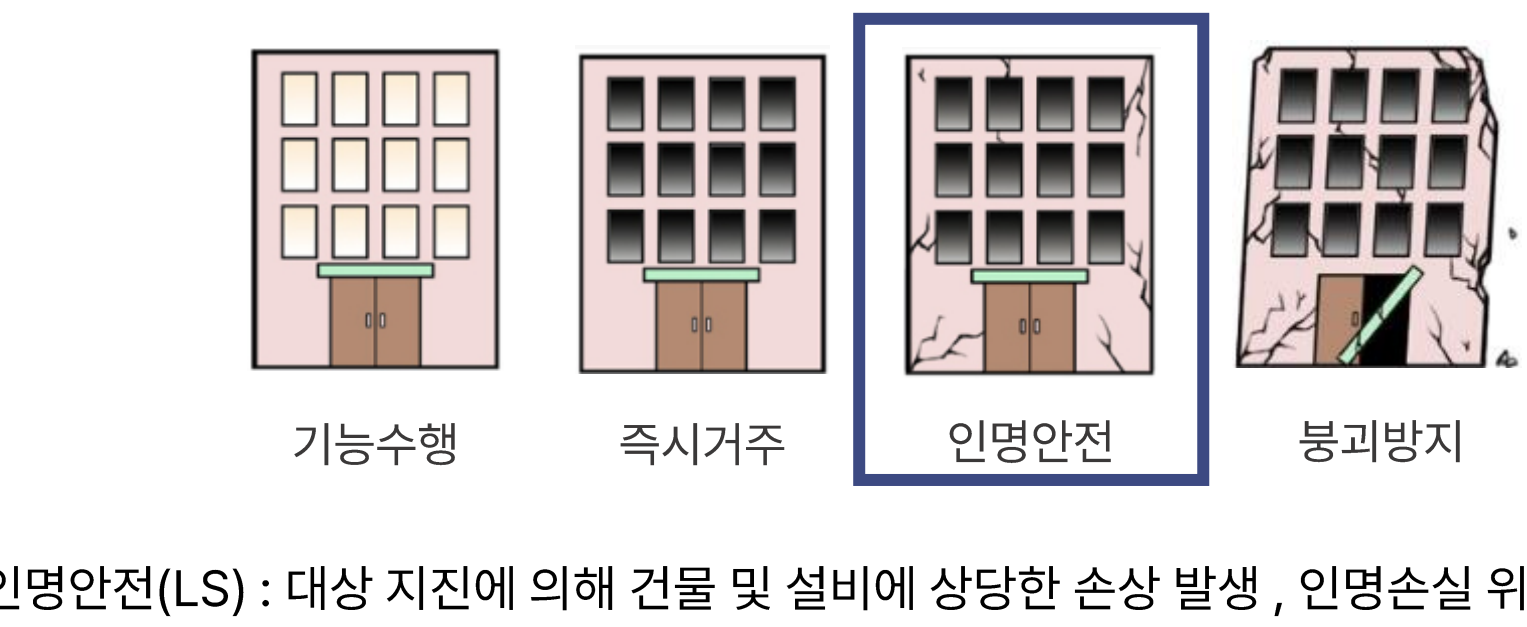
#### 중앙 후면 코어 (A유형)

구분	내용
연면적	392m <sup>2</sup>
건축면적	129.4m <sup>2</sup>
승인 일자	2016년 10월
성능 목표	인명안전(LS)
중요도계수	2등급

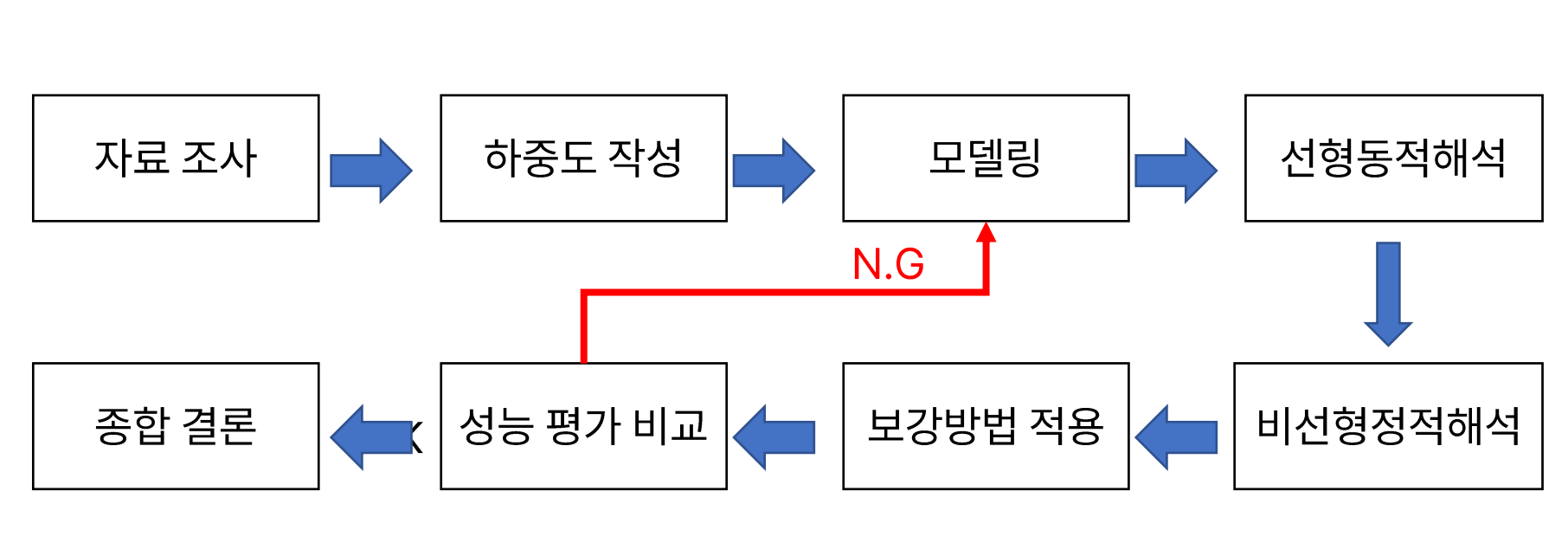
#### 모서리 편심 코어 (B유형)

구분	내용
연면적	441m <sup>2</sup>
건축면적	160.9m <sup>2</sup>
승인 일자	2016년 11월
성능 목표	인명안전(LS)
중요도계수	2등급

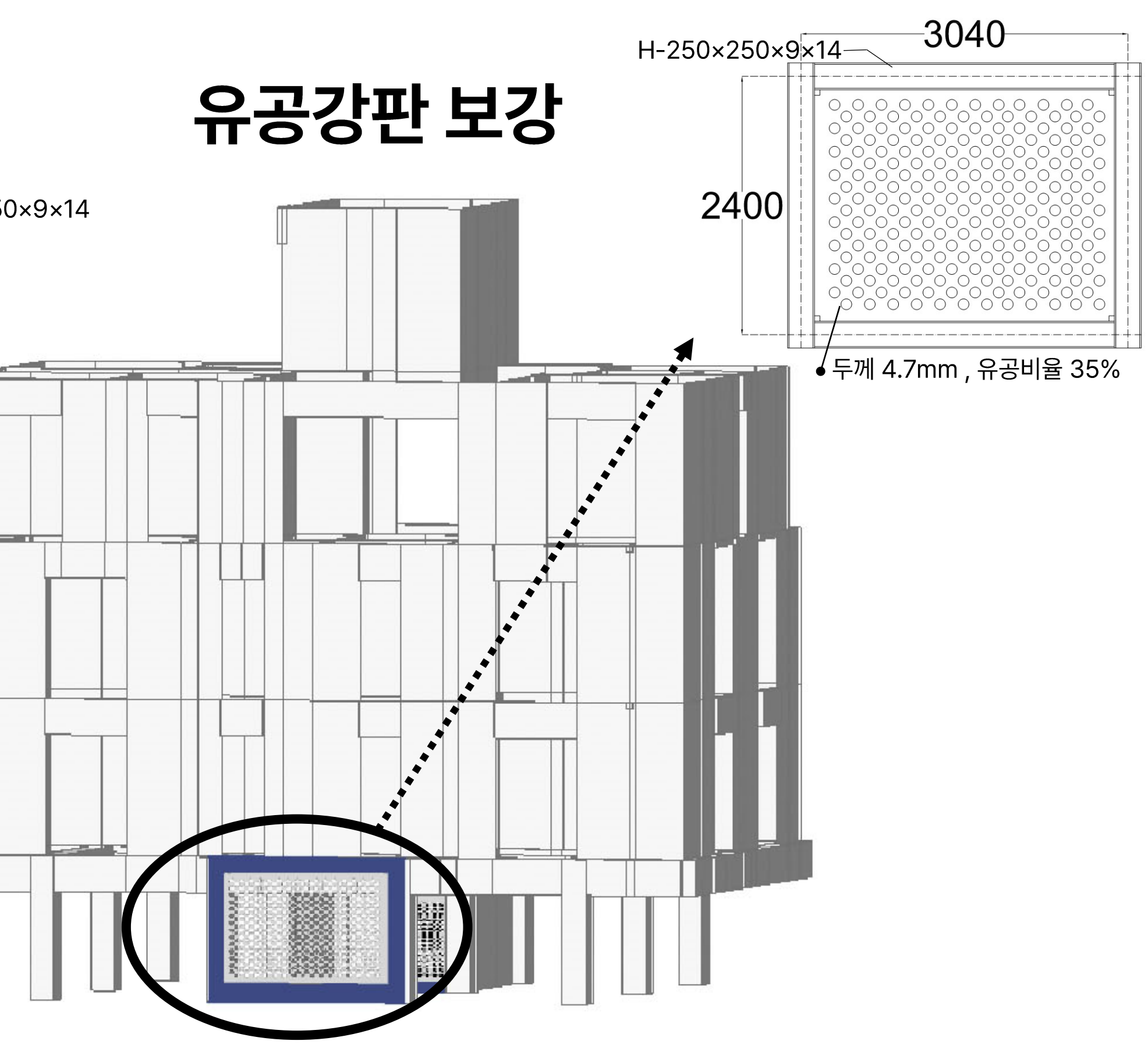
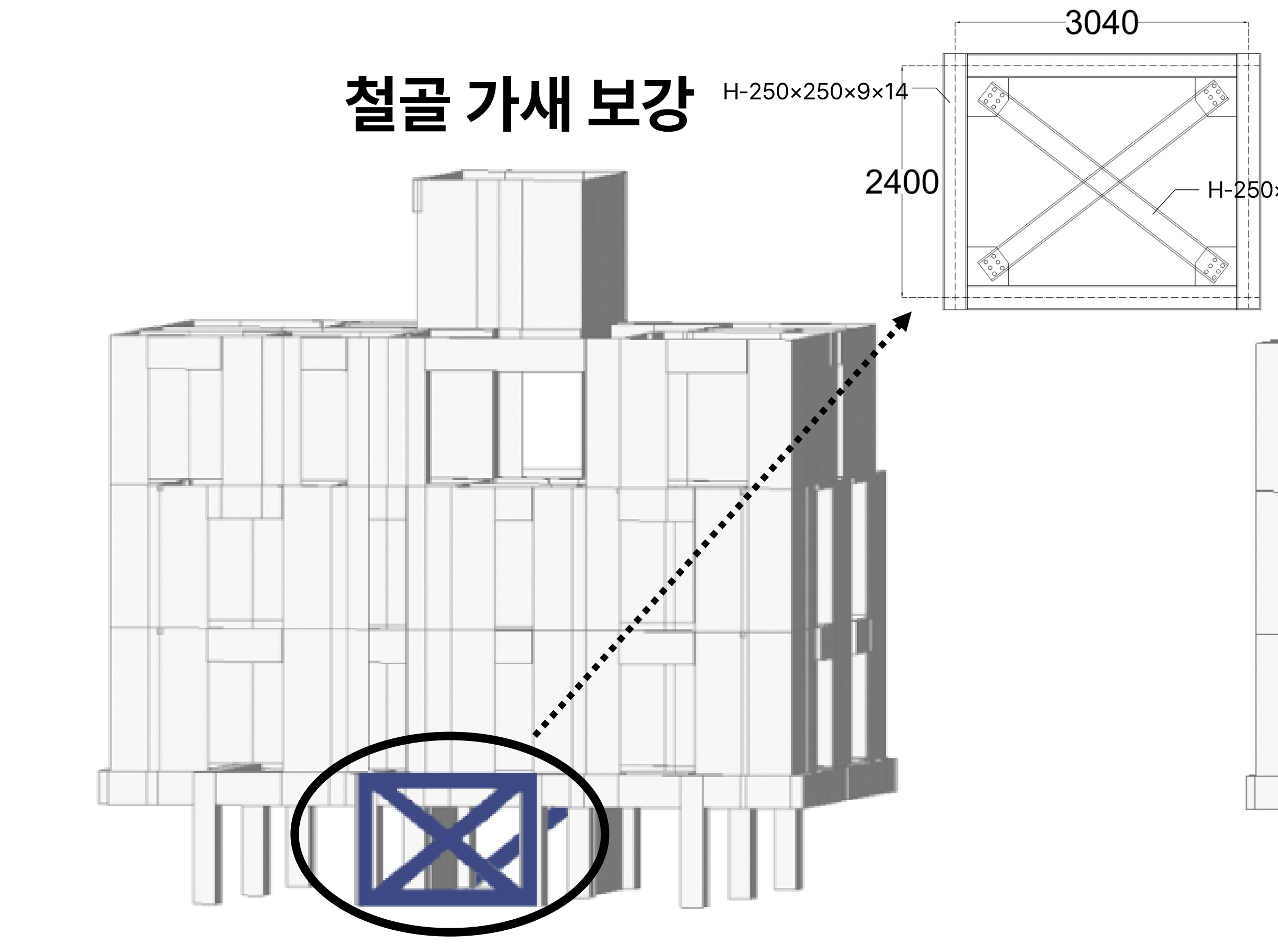
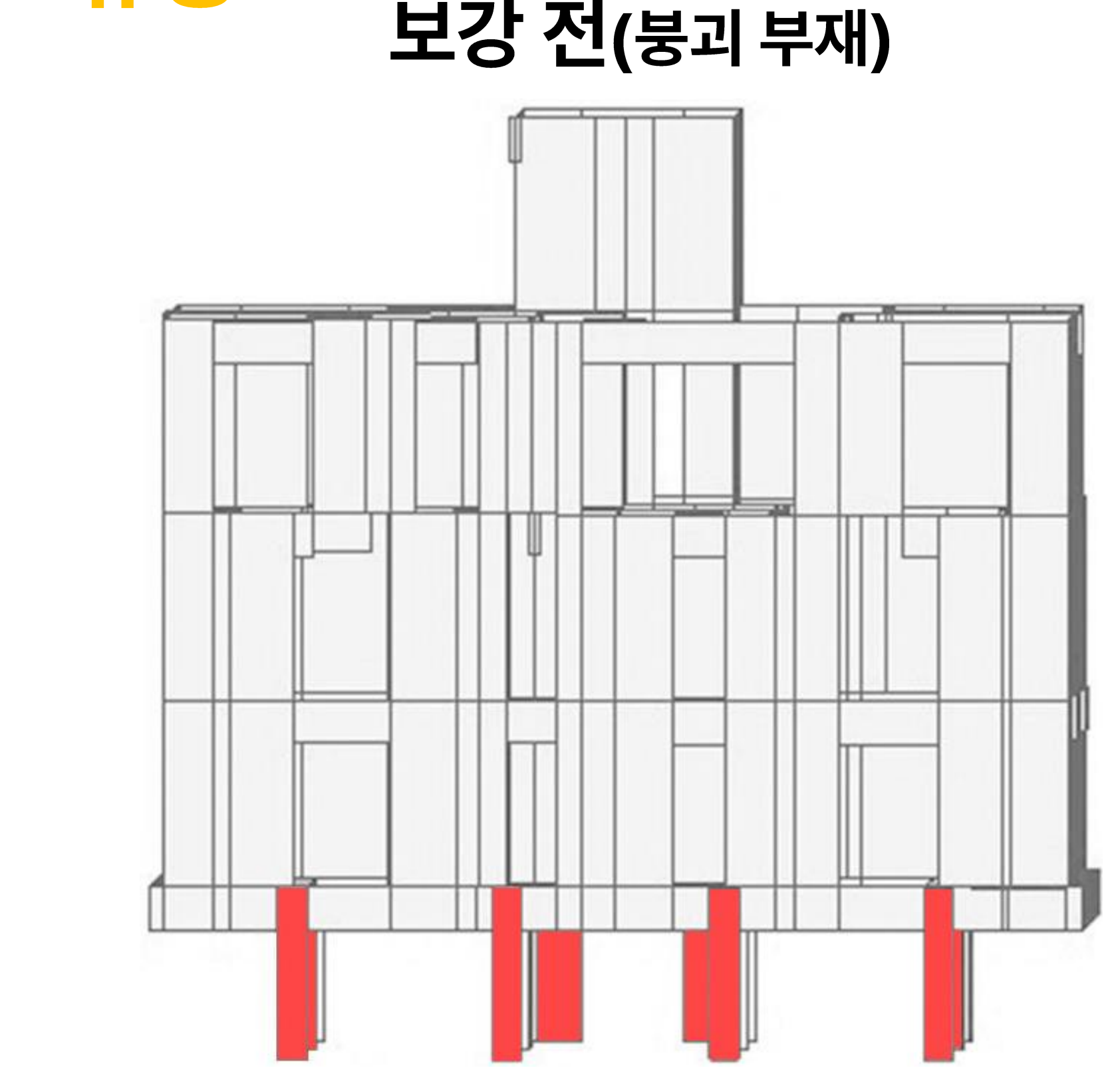
### 설계목표



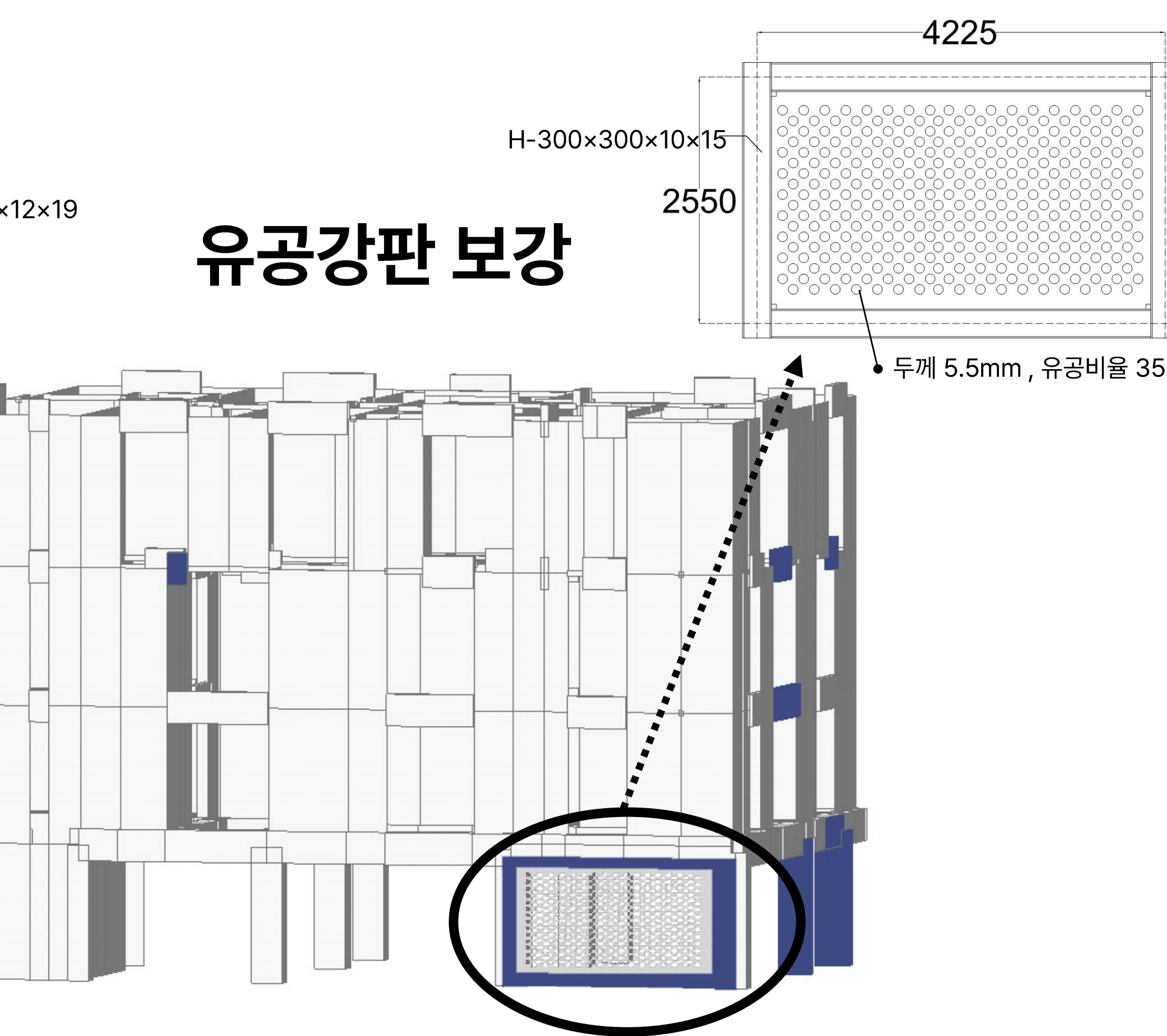
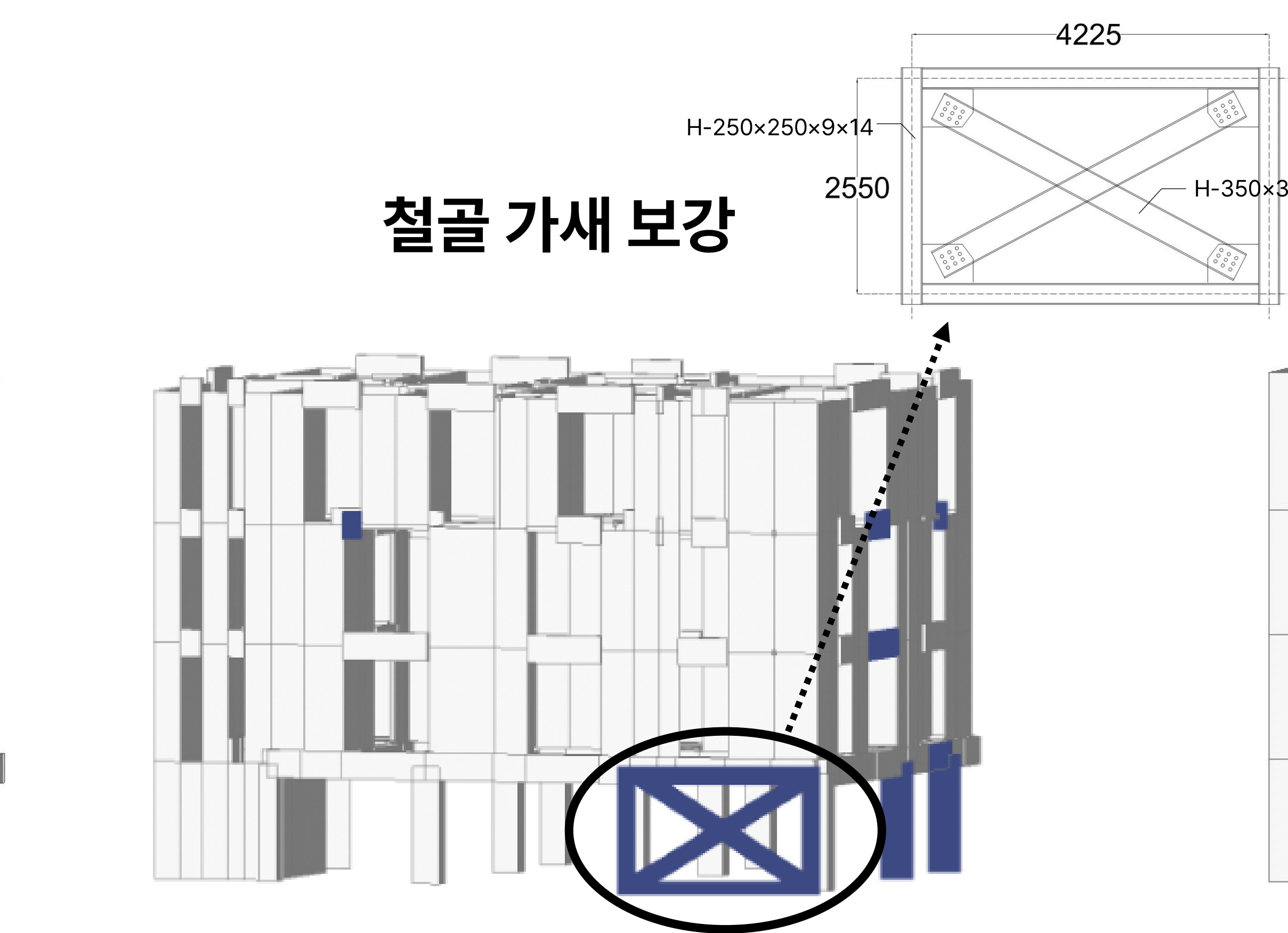
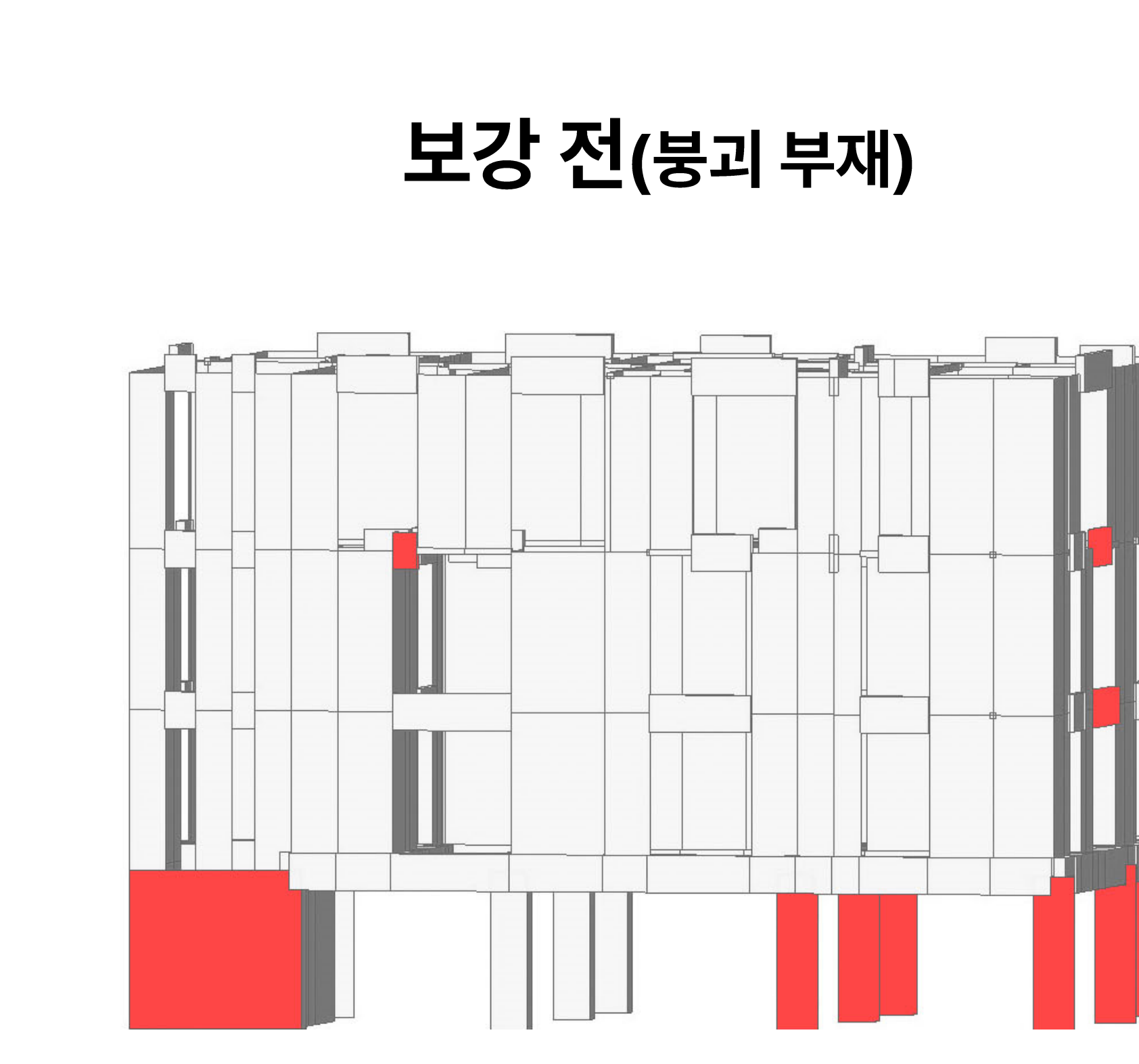
### Flow Chart



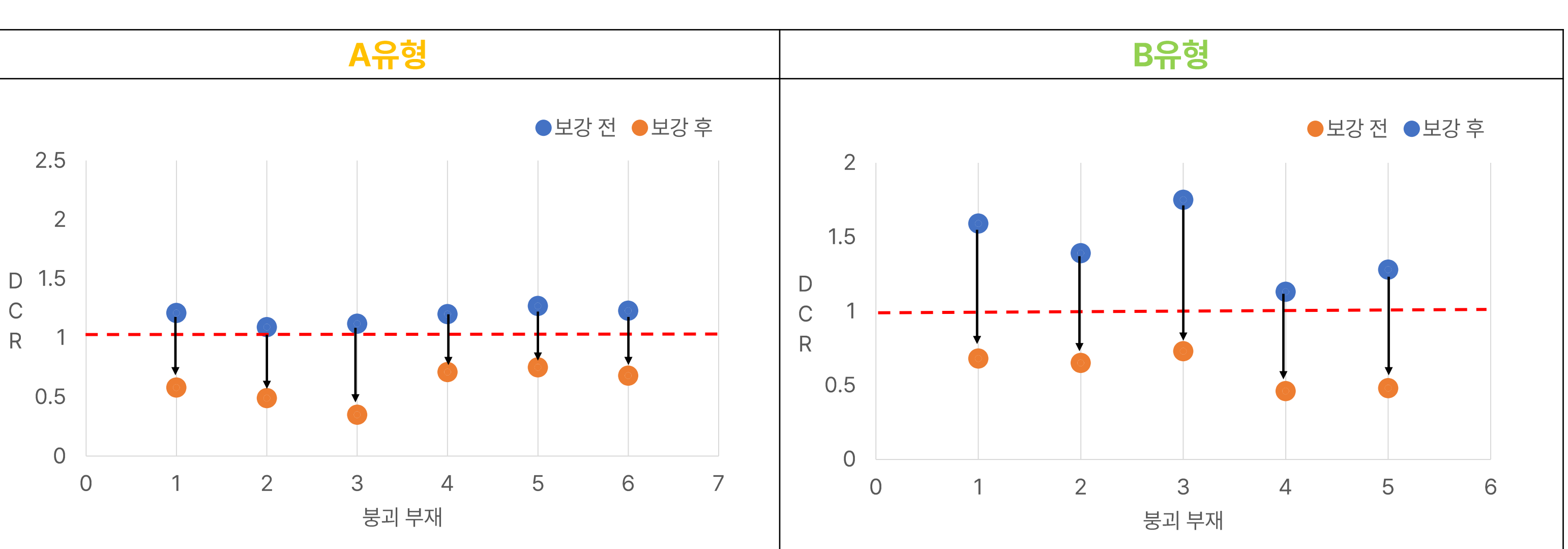
### A유형



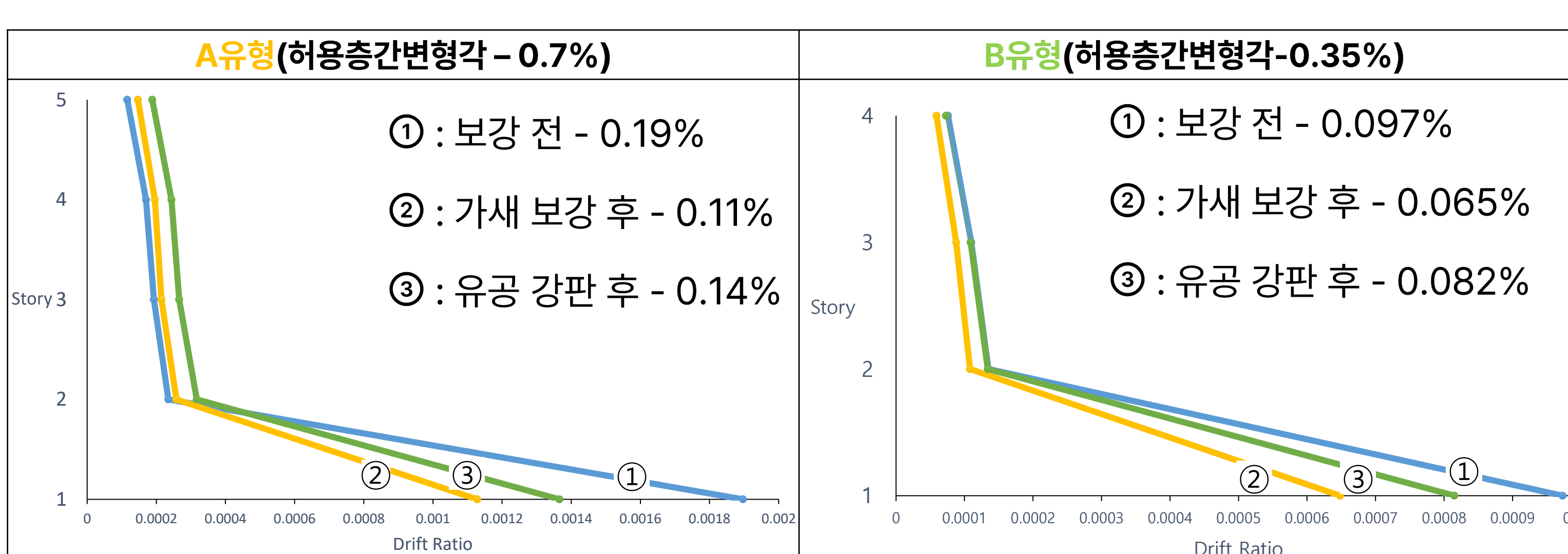
### B유형



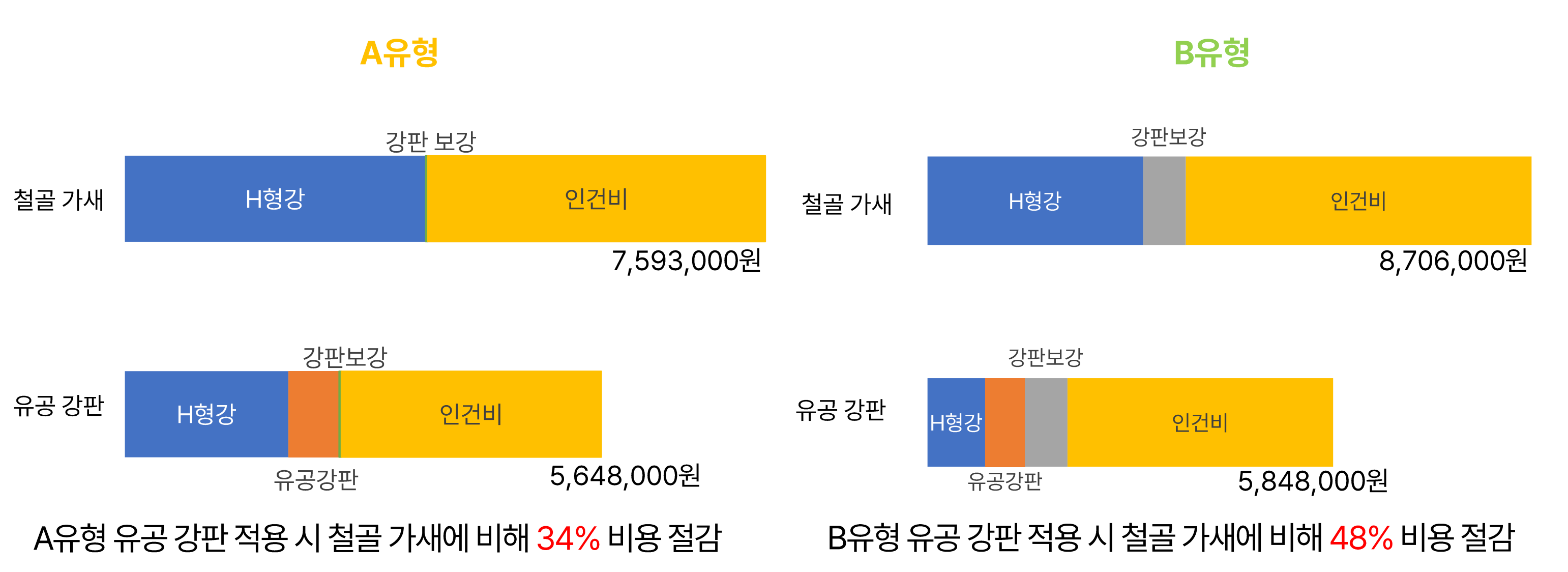
### 선형동적해석 DCR



### 비선형정적해석 층간변형각



### 경제성 비교



### 결론

- 보강 후 층간변형각이 기존 값들보다 감소하며 허용층간변형각(A < 0.7%, B < 0.35%)을 만족
- 보강 전 붕괴했던 부재들을 인명안전(LS) 수준을 만족시키고 내진성능 또한 향상됨
- 경제성을 비교하였을 때 유공 강판 보강 시 비용이 저렴하여 유공 강판 보강이 합리적