

High Rise Buildings

In the Middle East



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Agenda

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Introduction

A high-rise Building as defined by Emporis Data Community is as a building 35 meters or greater in height, which is divided at regular intervals into occupiable levels.

Construction in the Middle East is on the move. and there seems to be constant competition to build more impressive eye-catching High rise buildings. The use of innovative building materials and construction methods, coupled with workmanship of the highest standard, all contribute to a quality which bears comparison with anything in the world.

Throughout the ME One of the principal reasons for the huge sustained development of the area was the realisation of the need to diversify their economy to become less dependent on oil revenue. Thus, tourism is actively encouraged by the provision of world-class High Rise Buildings

Facts & Figures

- In fact land is **BOTH** available and Cheap in most Modern Cities in the ME. Municipalities for this reason are encouraging Horizontal Construction
- In The last decade things started changing. Gulf Countries in particular Started encouraging such Buildings.

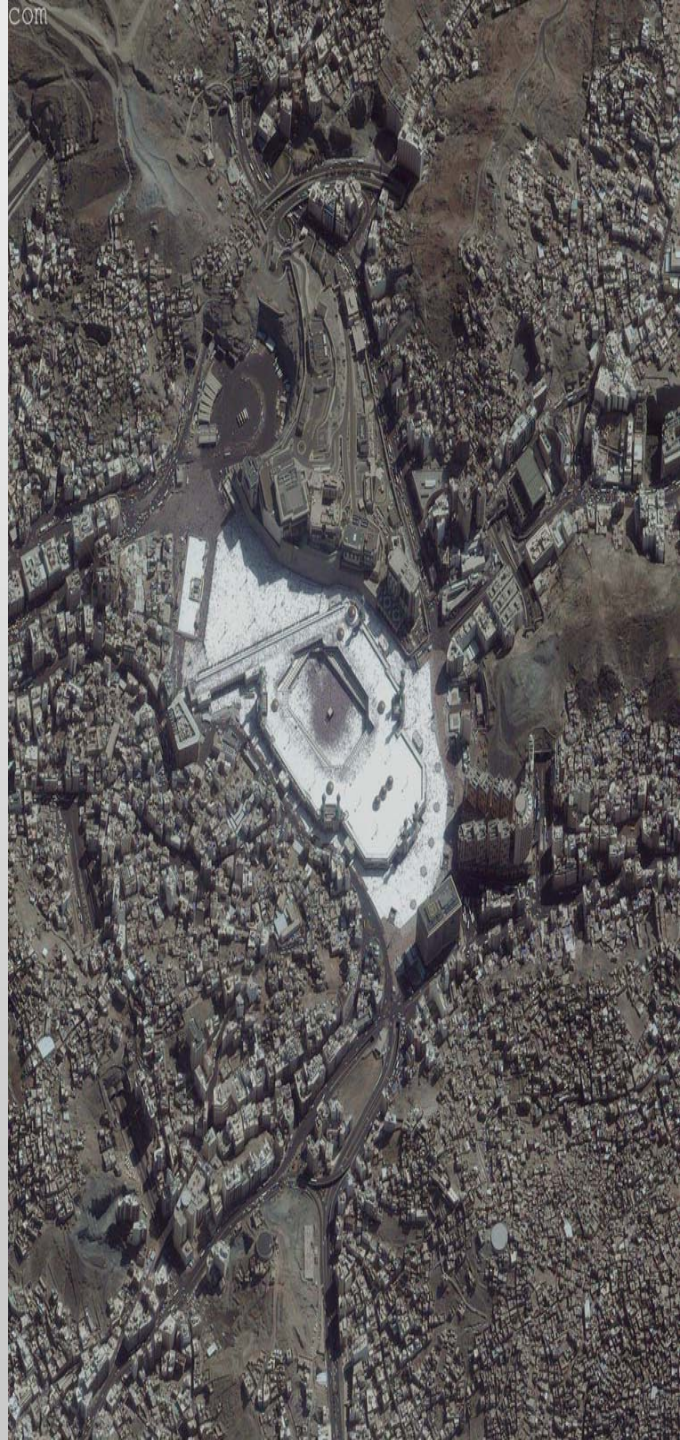
Why the Sudden Change ?

Definitely not for Space Savings. But Purely the need for Country Land Marks and to prove that their countries are up to the Standards.



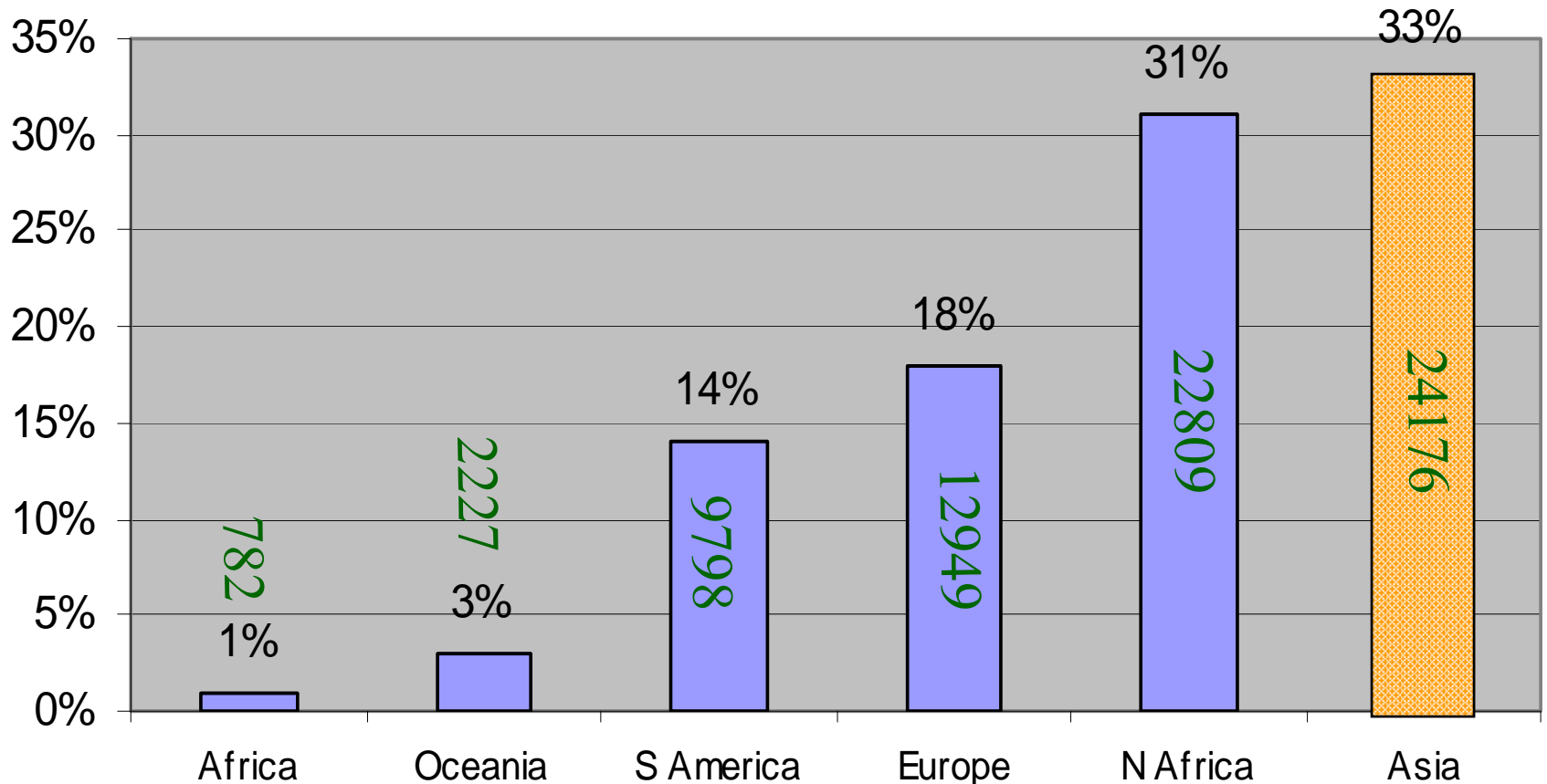
Facts & Figures ...Contd

Except in the Holy Makkah where the land is rare and is extremely expensive especially near the Holy Mosque, where A square Meter could reach the rate of about 40000 USD near in Mekkah.
(3500 USD per Square Foot



Facts & Figures ...Contd

Tall Buildings Under Construction



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Asia is on the move and so is the **Middle East**



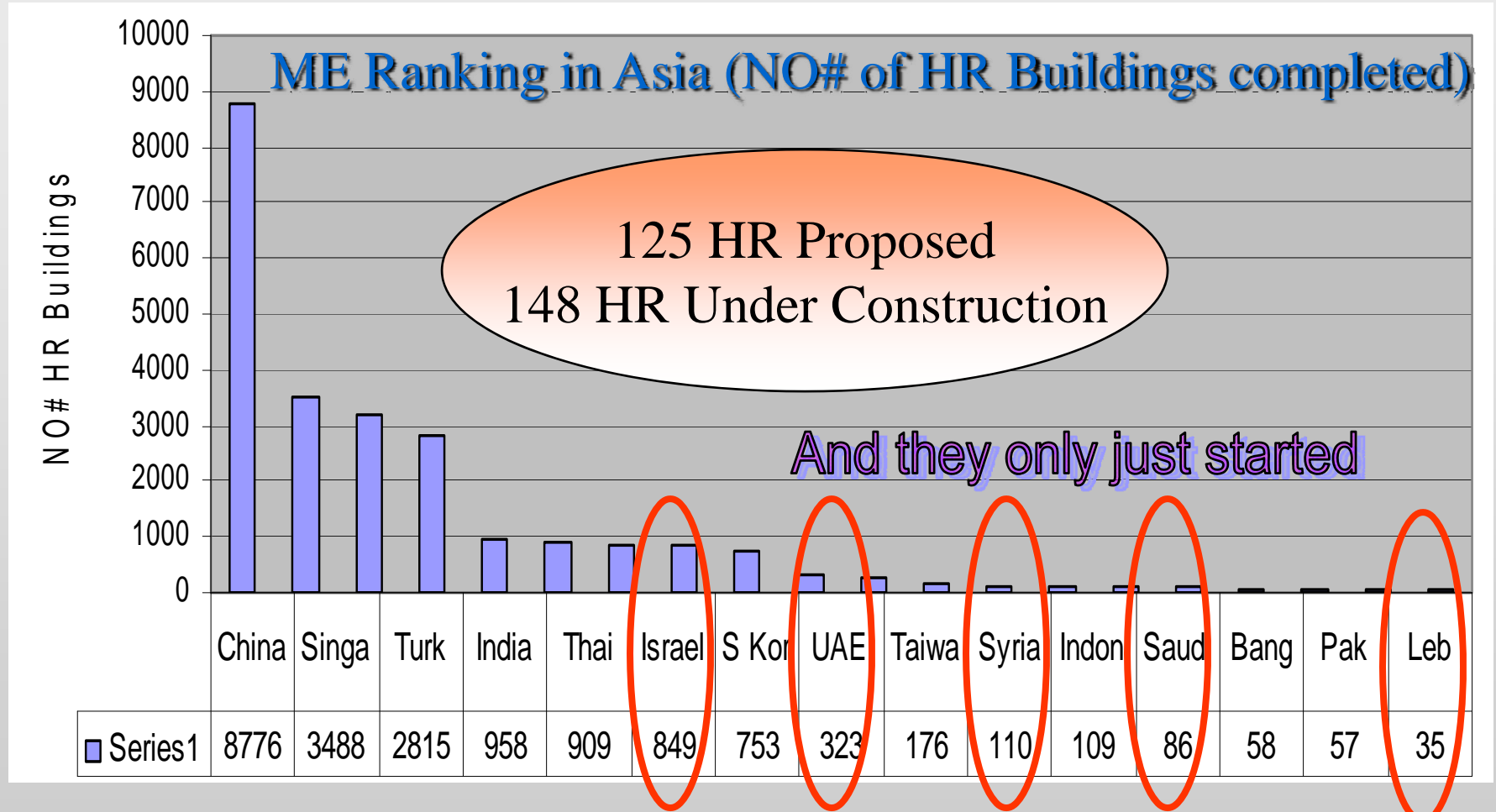
Middle East Insight

- Population of 230 Million covering an Area of 82880 Sq km stretching from Egypt on the Western most point to the U.A.E on the eastern end.
- Construction Boom in the Arabian Gulf Countries better Known as GCC Countries (UAE, Saudi, Kuwait, Qatar, Bahain, Oman) is due to Political and Economic Stability when compared to other regions in the Middle East.
- Oil fluctuations in prices triggered this diversification and sponsored it. There was a need to look somewhere else and Tourism was one.

In recent years the Middle East has emerged as a center for new tall buildings, with the construction of several very tall buildings in Dubai and Riyadh; commercial and residential projects in Tel Aviv; and tall buildings planned for Cairo



Middle East Insight



- Among the top 20 Countries In Asia in terms of Number of High Rise Buildings we find 4 Middle East Countries rising in only the last 10 Years.
- Among the top 20 Most active High Rise cities in Asia today we find 3 Middle Eastern Cities (Tel Aviv 13th, Haifa 16th and Dubai 17th).

Middle East Insight

A race of Very Tall High Rise Buildings evolved in the last decade in the Middle East.

Most of the Middle East Capitals and major Cities started constructing *Sky Scrapers* (Amman, Cairo, Jeddah, Dubai, Manama, Riyadh, Abu Dhabi)

Because these buildings look like a piece of Art lets have a view over Some of these Building or in other words *Land Marks* in these cities.





United Arab Emirates

Dubai



- Fastest Growing City in the Gulf
- 112 High Rise Buildings completed, 3 Approved, 17 Proposed, 44 Under Construction
- Currently Under Construction by Emaar.
- Tallest Building in the World by the time of completion exceeding 510 meters.
- A City Within the City combining residential, Commercial, Hotel, entertainment, Shopping Malls, Leisure outlets, Green Area, water features





United Arab Emirates

Dubai

BURJ AL ARAB,

- 321 Meters Hotel The only 7 stars Hotel in the world with 60 floors & the 2nd Tallest.
- Built on a Man Made Island inside the Sea in 1999
- By all means the Land Mark of Dubai
- In-Situ Concrete Building with Exposed Diagonal Steel wind Bracing Forming the shape of a Boat Sail Copied from a Yacht in St. Tropez



United Arab Emirates

Dubai

Emirates Office Towers

- Height : 355 Meters
- 54 Floors
- Completed in 1999
- Combination of Steel , Concrete
- Currently the tallest High Rise in UAE





United Arab Emirates

Dubai

Abbco Rotana Hotel

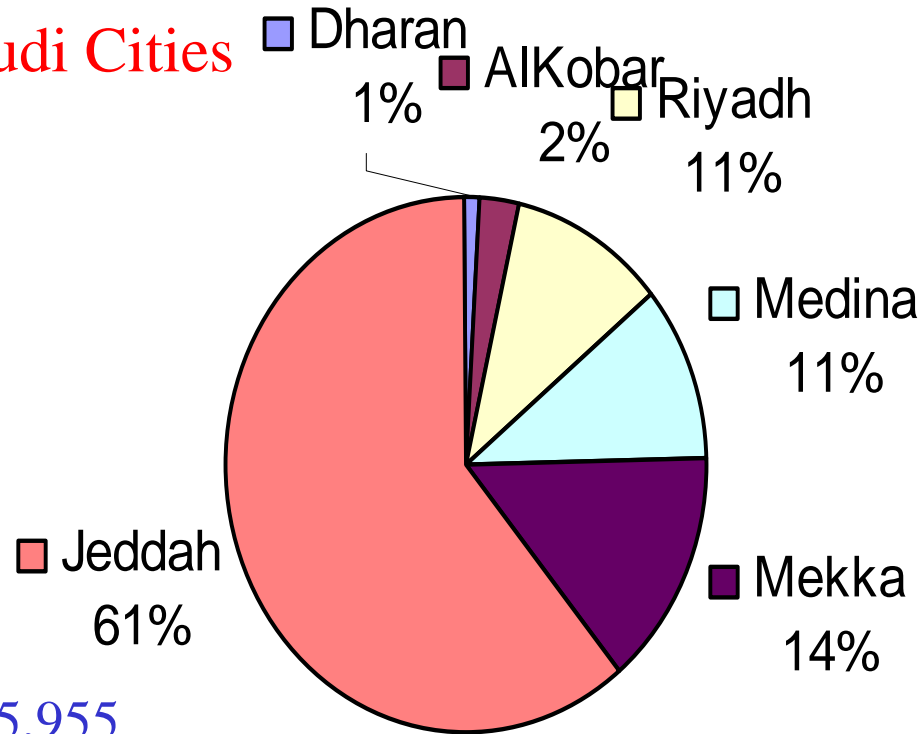
- Height : 333 Meters (Tallest Hotel in the World)
- 72 Floors
- Under Construction (Expected to open in 2007)
- Combination of Steel , Concrete
- 684 Guest Rooms (World Record)





Kingdom of Saudi Arabia

Concentration of HR Buildings in Saudi Cities



- Population :20,785,955
- Size : 2.240.000 km2
- 86 Completed, 18 Under construction
- Many are proposed in both Riyadh the Capital of KSA & Jeddah
- In addition 50 Towers in Makkah Only were recently announced (52 floors)



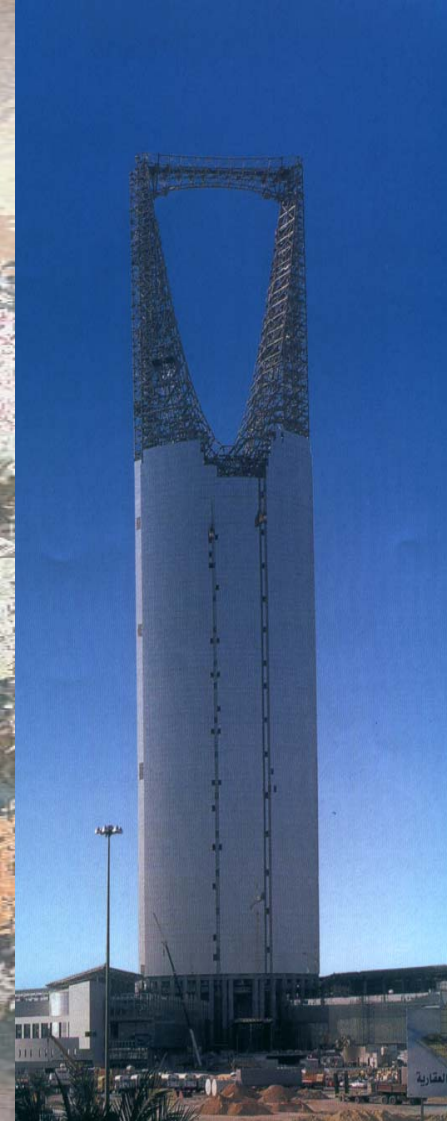


Kingdom of Saudi Arabia

Riyadh

KINGDOM TOWER

- 300 Meters High with 200m of concrete Structure plus 100m of U Shape Steel Structure
- All Building was Covered with Aluminum Curtain Wall
- Completed in 2001





Kingdom of Saudi Arabia *Riyadh*

AL FAYSALIYAH TOWER,

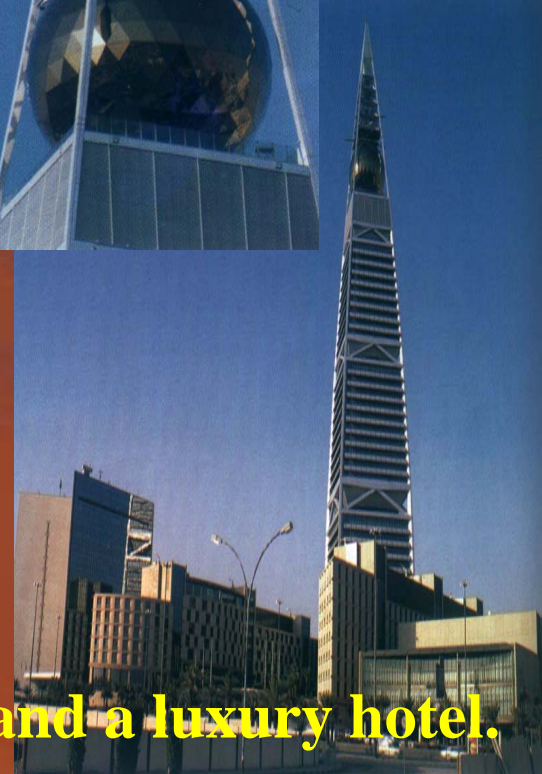
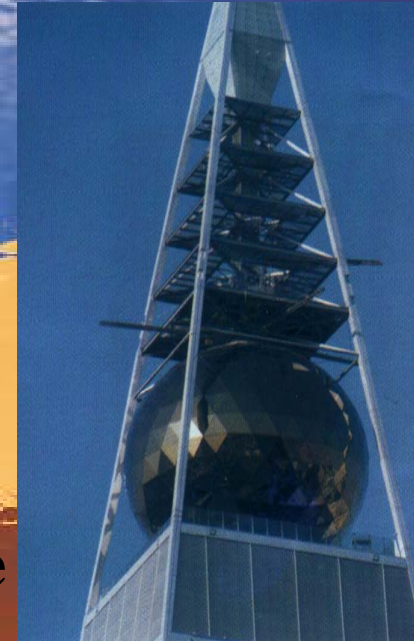
***NOT FAR FROM THE KINGDOM
TOWER,***

***WITH THE GLOBE SPHERE HANGED
ON THE TOP with Three level Restaurant .***

**The tower is aligned in a direct axis with the
Kingdom Tower**

The 4 corner beams are connected at 4 levels by
exposed A-bracing. On the upper levels there
are galleries around the bracing structure.

The tower is connected to a major shopping mall and a luxury hotel.



Personal experiences in High Rise Buildings

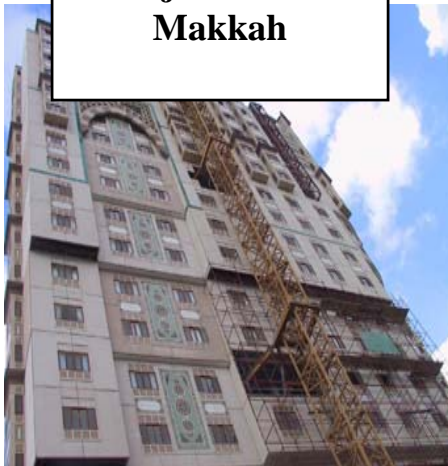
Two Towers , One in Jeddah and one in Holy Makkah. Both are the tallest in these cities but still not as tall as the previously mentioned super towers yet a great learning experience.

1- Burj Al Gowar

- Expensive Land
- Crowded Area
- 30 year old Sewage System which encouraged us to recycle in order to save water and eliminate load on sewer lines
- No parking space which lead us to create parking floors with equipment to accommodate two cars parked on top of each other. Did not work??



**Burj Al Gowar
Makkah**



Personal experiences in High Rise Buildings

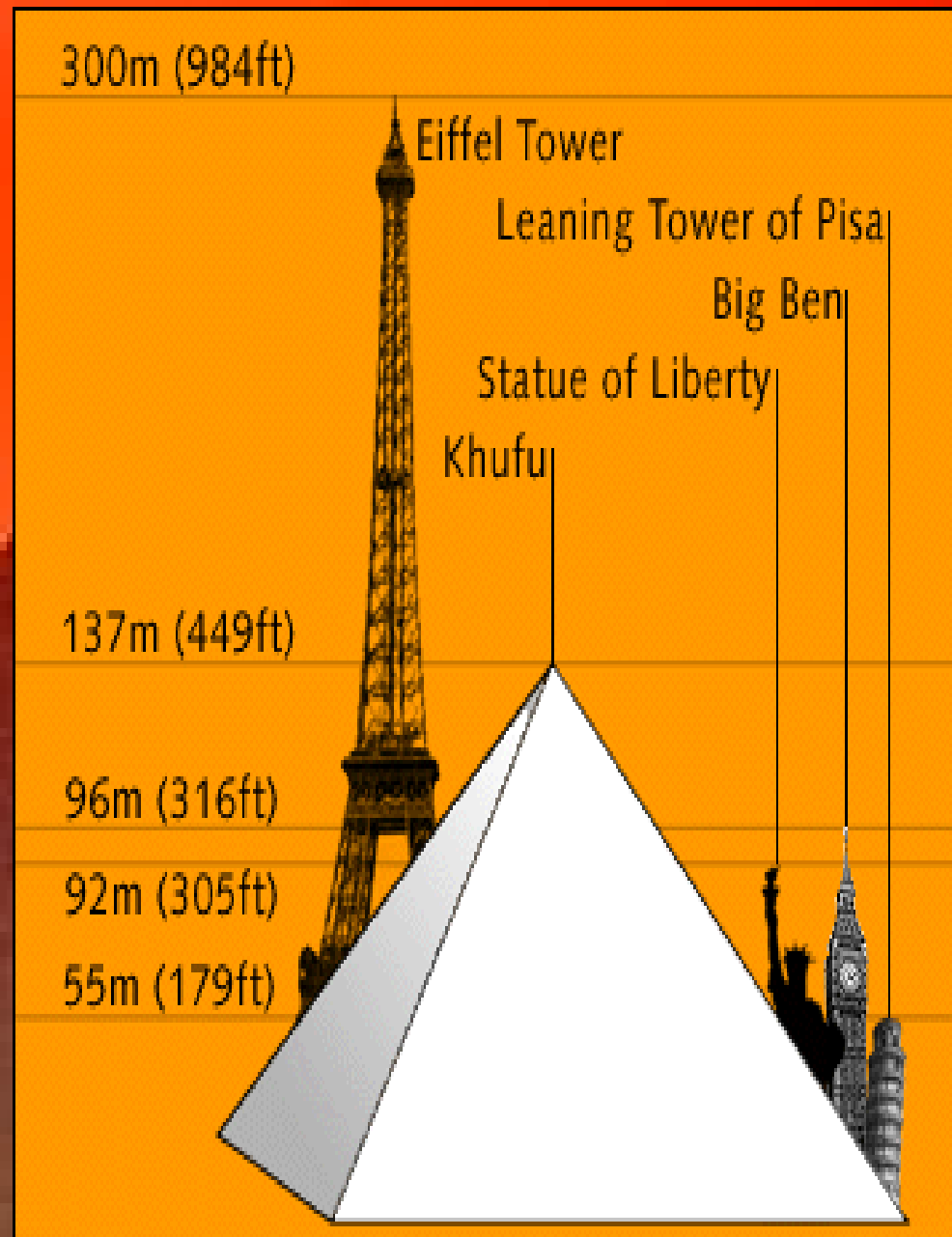
2- Diyar al Bahr



Started Construction in Mid 2003 and expected to finish in 2006

Lets Remember

At 146.5 m (481 ft) high, the Great Pyramid stood as the tallest structure in the world for more than 4,000 years.



Thank You