HSS CASE STUDY: RESIDENCE

Building a residence has always been a long and hectic process not only for the client but also for the stakeholders involved in the construction of it i.e, Engineers, Contractors, Architect, Fabricators etc. But ever wondered if you could squeeze down the time-frame to a certain extent and that too with reduced cost? Well, it was a dream to many a few years back but now with the advent of structural steel, it has become as simple as you had dreamt.

HSS for Residential Project:

Quicker Construction,
Lower Fabricating Costs,
Increased Aesthetic Appeal

Project:

The project was to build an approx. 8,000 sq ft residence using Hollow Structural Sections (HSS) in Karachi, Pakistan.

Challenge:

This was the very first time a residence was being built using HSS so it was a challenge for every stakeholder involved in the construction of it i.e, Client, Product Manufacturing Company, Architect, Engineer, Contractor, Fabricators etc. While the company was confident, the other stakeholders were doubtful initially but then were made convinced to opt for the product to build the first ever residence using Hollow Structural Sections.

Execution:

Initially, major civil work was carried out at the project site which included excavation, RCC footings, Lean Concrete etc. Once this was completed, **IIL Hollow Structural Sections (HSS)** were used for setting up the structure of the residence which mainly included columns & beams. The structure was erected within no time i.e, less than 3 months as compared to if it would have been erected using RCC which would have taken more than 6 months to complete. Therefore, this quick erection of complete structure not only brought the residence onto its foot but also reduced mutiple costs.

Achievement:

Completion of structure within the committed target date.
Stakeholder Satisfaction

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PROJECT:
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CHALLENGE:
This was the very first time a residence was being built using HSS so it was a challenge for every stakeholder involved in the construction of it i.e, Client, Product Manufacturing Company, Architect, Engineer, Contractor, Fabricators etc. While the company was confident, the other stakeholders were doubtful initially since they have always been comfortable using RCC for structure construction despite its serious disadvantages, and have never been introcued to a much better & cost-effective solution. But here, IIL was able to better communicate the benefits of using HSS for structure, thus, won the trust of everyone to opt for the product for this project.

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ACHIEVEMENT:
Completion of structure within the committed target date.
Stakeholder Satisfaction

PROJECT VIDEO:
To watch the video, kindly visit our exclusive HSS section on our website | www.iil.com.pk/IILHSS

HSS for Residential Project:

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Increased Aesthetic Appeal

HSS Case Study:

First Residential Project in Pakistan

Building a house has always been a long and hectic procces. But have you ever wondered whether you could squeeze down the time-frame and that too with reduce the cost? With the advent of IIL Hollow Structural Sections (HSS), this has become a practical solution.

PROJECT:

To build 8,000 sq ft residence using IIL's Hollow Structural Sections (HSS) in Karachi, Pakistan.

CHALLENGE:

This was the very first time a residence was being built using IIL HSS so it was a challenge for all stakeholders involved (Client, Product Manufacturing Company, Architect, Engineer, Contractor, Fabricators). While the company was confident, the other stakeholders were doubtful initially since they have always been comfortable using RCC & Re-bar for construction. IIL was able to better communicate the benefits of using HSS for the structure construction, thus, won the trust of all involved to opt for the use of IIL HSS for this project.

MATERIAL:

- 8"x8" IIL HSS were used as main columns
- 6"x6" IIL HSS were used as support columns
- 4"x4" IIL HSS were used as horizontal beams
- ISL Galvanized Sheets were used for roofing

EXECUTION:

Initially, major civil work was carried out at the project site which included excavation, RCC footings, lean concrete etc. Once this was completed, IIL Hollow Structural Sections (HSS) were used for setting up the structure which mainly included columns & beams. The structure was erected in less than 3 months which is half the time it would have taken with RCC + Re-bar. Therefore, the quick erection of the complete structure not only brought the residence onto its foot in record time but also reduced project costs.

> "With the use of IIL's HSS, we knew we were paving the way for a new kind of construction technique in Pakistan. We have saved the client time & money, and the results are fantastic & speak for themselves." *- Architect*

ACHIEVEMENT:

Completion of structure within the committed target date.
Stakeholder Satisfaction.

> "I was amazed with the speed of construction. Watching my house come together so quickly was highly satisfying" *- Client*

PROJECT VIDEO:

To watch the video, kindly visit our exclusive HSS section on our website | www.iil.com.pk/IILHSS

ABOUT THE COMPANY

International Industries Limited (IIL) is Pakistan's largest manufacturer of steel, stainless steel and plastic pipes with an annual manufacturing capacity of 750,000 tons and annual revenues of almost Rs. 17 billion.

Head Office - Karachi:
101, Beaumont Plaza,
10 Beaumont Road,
Karachi.
Tel: 111-019-019

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First Residential Project in Pakistan

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PROJECT:

To build 8,000 sq ft residence using IIL's Hollow Structural Sections (HSS) in Karachi, Pakistan.

CHALLENGE:

This was the first case in Pakistan where a residence was being built using HSS. As a result, certain stakeholders were hesitant to use HSS as they were more comfortable using traditional construction methods (RCC & re-bar). Close coordination between the Company and construction partners (Architects, contractors & fabricators) created an environment of confidence around the use of HSS and alleviated any concerns. IIL clearly communicated the benefits and methodology of using HSS and supervised the onsite fabrication and welding of the columns, beams and purlins in order to ensure a seamless construction process

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> "With the use of IIL's HSS, we knew we were paving the way for a new kind of construction technique in Pakistan. We have saved the client time & money, and the results are fantastic & speak for themselves." - *Architect*

> "I was amazed with the speed of construction. Watching my house come together so quickly was highly satisfying" - *Client*

ACHIEVEMENT:

- Completion of structure within the committed target date.
- Stakeholders' Satisfaction.

PROJECT VIDEO:

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ABOUT THE COMPANY

International Industries Limited (IIL) is Pakistan's largest manufacturer of steel, stainless steel and plastic pipes with an annual manufacturing capacity of 750,000 tons and annual revenues of almost Rs. 25 billion.
