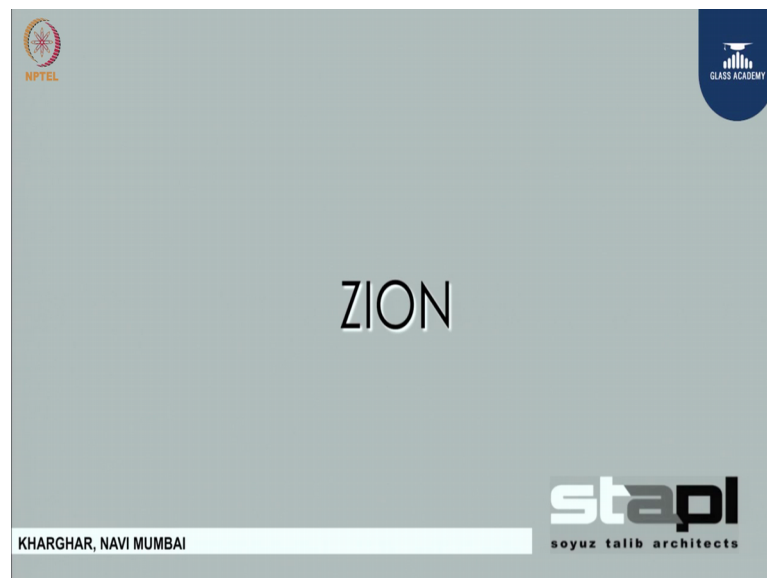


**Glass in Buildings: Design and Application**  
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**Lecture - 85**  
**Case study-Commercial Buildings\_Part III**

Move to our last project that I would be talking about today is called Zion.

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It is a project that we designed a few months, few years down the line in 2014 and it just got completed in 2017 this is a project that we have built again with the glass going black and gold. And the reason is again our client's requirements to build something that is exciting, something that is going to be landmarks, something that people are going to look at and adore, and that is why Zion is where we land up putting in again the gold in the glass on the gold and black on the facade.

Of course here we worked in a different format. And like you seen in most of the building projects that we have done we have kind of changed the formats in which glass is fitted on the facade of the building. We have been experimental in the way we do it so that there is enough interest for the client, there is enough interest for the buyers, there is enough interest for the architect who is designing the building. And the end product is something that is something that everybody loves and is something that everybody likes.

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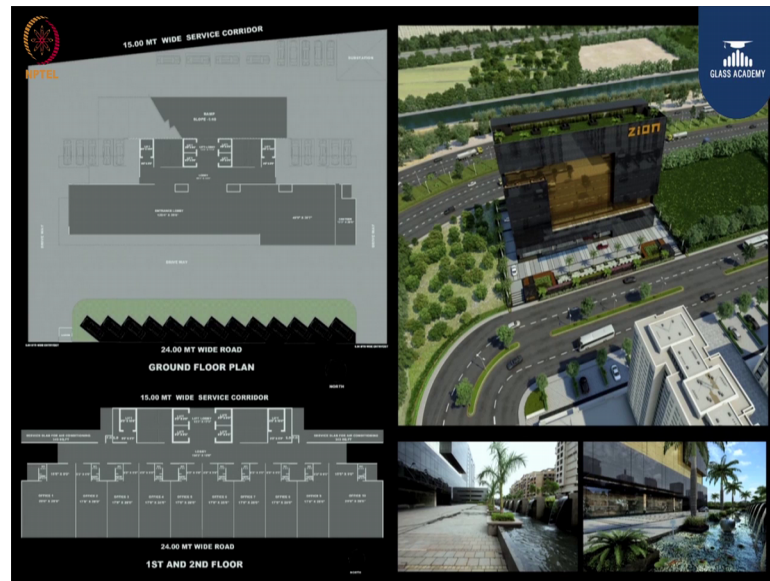


This building again I would say was a product that got built because of very, very strange reason earlier the building was planned with it is facade facing the north and the east. But, then due to certain other considerations we had to reorient the building and because of the reorientation process, the facade shifted from it is north and northerly and easterly looking side to a south westerly looking side.

So, if you see the facade that I am showing you right now there is the offices which face the south west specifically and the building on the outer is done absolutely in black and gold. Black is again grey dark grey that is reflective dark grey glass. And the gold is neutral gold which is used on the inner facade to create the two different surfaces of the building.

Now, here we have again because of south westerly side the performance is something that made it important for us to use a lot of reflective glass lot of the facade is done up in black so, that you can control the amount of light that is actually getting into the building, because of the facade heats up very, very fast. And a lot of the facade is done up in gold, because you want to reflect out as much heat as possible and also control the amount of light getting into the building. So, for this particular project if you look at the building the way it has been built.

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It is highway at the back and the building faces the inside side. Like I told you the earlier the facade was actually facing the north, but then it kind of got back and it started facing the south southwest. So, the main facade of the building is where the offices are located, that is the main area where the lobby is located with the driveway and the entrance. So, on the drive to the building what you see is the main facade of the building, when you are getting into the site that is what is visible out there.

Of course, the reason why the facade has been done in black and gold is again something that came out of the fact that our client was looking at something that was new and something that was going to be not seen around, something that performed also. But, they were not clearly looking at the blues and the greens and glasses that had high performance, but were this something that you call that is used extensively within the system.

So, the problem is that every time people want to build something, they want to kind of be experimental and do something, new with their buildings the developers always put the pressure on to the architects to sit down and deliver something that is not available, not seen before something that is going to be something that they get known for, something that improves their brand image and things like that also.

So, in the process of trying to build new buildings and build new facades and conceptualizing and visualizing new facades at every given point of time when we are

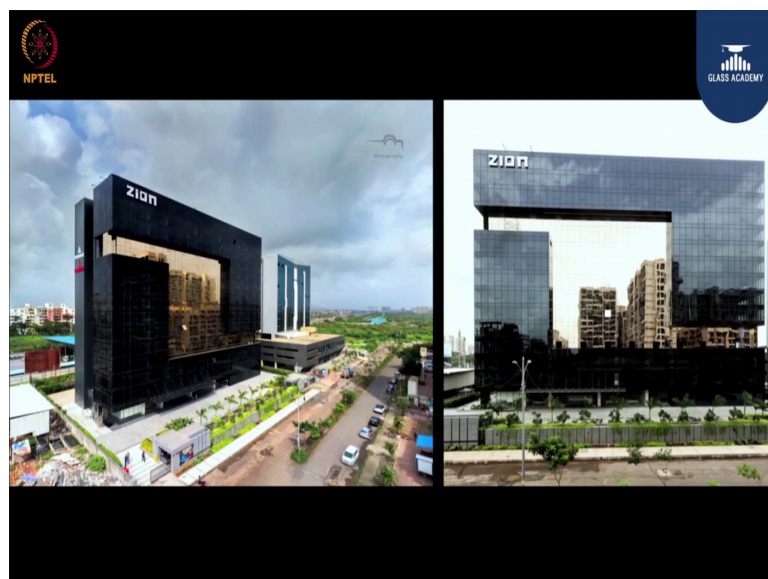
working on building projects, we kind of land up thinking of how to build differently, build something new something that our client should would like. Something that people in the building people working in the building would love.

There are experiences of people going new offices and saying yes I like window office, and the reason why you would love going in office is because of the way it is built the way it relates to you, the way it kind of speaks to you. The office space kind of grows on you over a period of time. And it basically improves the working performance of people within building, the minute they are in a better space and a better atmosphere in something that you would be comfortable working with.

So, right from probably the way people get into the building and they move and look at the building to the way they walk through the lobby right up to the doorstep till they enter their office and reach the workspace is an experience that we need to create for people. And only when we can create that kind of experience which they like is their performance going to improve.

So, the now here this is the facade of the building this is something that I mentioned earlier, is going to forms the main facade which is something that you see when you walk towards the building.

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And as you walk through the lobby which is on the ground floor of this building you walk through the canopy that was out here.

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Now, what we have done out here is again since we are facing southwest, we kind of change the colour of the glass that is on the roof of the lobby. And we shifted from using plain glass to the black tinted glass so that we could cut down the amount of light that actually entered the lobby. Because, we are again facing the south southwest area and we had direct sunlight that went all the way up to the reception on the lobby. So, to cut down that we had to add in a tinted glass so, we kept the main facade of the lobby reflective and sorry clear and we added in a tinted glass on the canopy of the building so that we could control the amount of light that got in.

So, this is another thing that we kind of experimented with, we kind of added in something that was different which we had not done before all the canopies that we had built earlier, all built with clear glass and for the first time we will end up actually building the canopy on this building with tinted glass.

Also we improved the quality of the glass that we use for the entrance out here. So, instead of using the regular clear glass that is available, we kind of shifted on to a performance oriented clear glass that formed the base of the lobby and kind of control the amount of light that gotten. So, that also improved the kind of the heat that got in the lobby and improved the performance of the air conditioning system within the lobby.

So, that is more or less the sum up of the 5 projects that I wanted to show you. And probably put forward to you the ideas that we have been through in all these years as an architectural office. And what are the various ways we kind of moved ahead with our experience with glass. In this 14 or 15 years we have been working closely with this material.

And this is something that is we want put across to most of the people I would like to again summarize a few of the things that I would say are important for people who are viewing this video. One is to always learn the process of understanding what the material is before you actually start designing with it.

So, most of the people would you know design buildings putting facades, but not know too much of the material. We have been moving this step by step over the years, I would advise anybody who is specifically working on facades to move step by step gradually into any kind of facade design, rather than you know build something that is an engineering feat which cannot be accomplished.

So, the entire use of glass and the kind of methods of putting assimilating different materials and different colours of glass also to be put within the same facade is something that you need to really look at. And experimenting does not just stop here, I mean we are just at our first few buildings we are we have already worked furthermore on many more buildings, where which I am at the drawing board right now, they are not completed projects. But, those buildings are something that are going to be the next gen buildings.

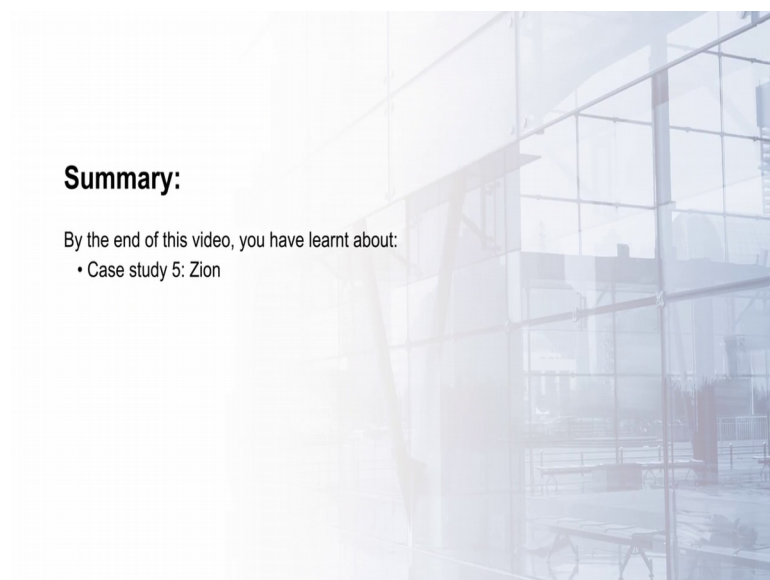
We are experimenting largely with ceramic glass plating, on facades of buildings which would actually change the aesthetics to something totally different we could make a building; probably look like newspaper front. We have worked on fritting buildings, we are looking at buildings with digital prints on them and doing entire building facades with digital printing and things like that; which would be the next step for us and something that that would lead our experimentation to the next level.

Of course, at any given point of time we are very, very sure that whatever we are doing it does not really create hindrance for people who are going to use and operate from within the building. So, it is something that we keep very, very foremost in our mind so

that we do not go overboard in our aesthetical sense to kind of reach a point, where we only think aesthetical and do not think practical.

So, yes, but we have been thinking beyond what we have already done and we are working on projects which will have in the near future to a great extent new technologies such as digital prints, ceramic frits. And of course, we are still probably now looking at the next gen of glass which are triple silvers and even better performing glass than we have already used before. So, that is something that we as an office would want to continue with continue building our building on what we have already done. And moving head from where we have already reached to better and more beautiful buildings for the future.

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Thank you; thank you very much.