



Offsite Construction and
Prefabrication Summit

May 23 – 25, NYC

Building THE STACK

The architect of the first modularized residential building in New York City tells us how he did it, in advance of the Offsite Construction and
Prefabrication Summit.



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PETER GLUCK
Principal - Gluck+
Summit Speaker

IQPC: Peter, the Stack was the first steel and concrete modularized apartment building in New York. You were breaking new ground. How did you get involved with this project?

Peter: We started with a developer that we partnered with on the project. The idea was to come up with a system for providing infill buildings in sites that are twenty-five to fifty feet wide in the city without all of what we call 'the aspirin' of trying to get a relatively small building built properly and well. So the idea was to use our intellectual property to do more than one project with essentially less work. To do five or ten of these things would just about kill you. The construction process is so complicated, so difficult, especially in New York. There's got to be a better way. So we're trying to find a better way.



View a short video about the construction of the Stack at gluckplus.com/project/the-stack

What's the key issue that you had to face in a complex urban setting like New York City?

The real issue is that the modular manufacturers are in rural areas and their relationship to subs and the construction world is quite different than when they hit New York, which is a much more complicated environment. So there's a lot of work that has to be done on the site that the modular people, who have built the modules, can't really cope with. They can't bring their own people.

They'd have to come up from Pennsylvania or something?

The modules would come from Pennsylvania but they can't bring their own subs who make all the hookups. The guys who actually built the project. So you'd have to get a separate set of subs to do the hookups. At least that was our experience.



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Did you have any problems navigating the streets of New York with the modules?

We didn't have too much trouble with that. I mean, it's something you figure out beforehand. We were lucky we had an empty site next door, but the staging of the project is something that's critical. In some cases you pretty much can't do it. But the staging was not really the problem. The problem we had was with New York City who realized halfway through our project that it was modular.

They didn't know from the start?

They didn't seem to have really understood it.



So what did they do? How'd they give you trouble?

They actually did a freeze on the project and stopped us for about three months while they looked into it.

I imagine that raised your operating costs...

Didn't help. We had a long dialogue with them and they were interested in issues of fireproofing and they were interested in all kinds of things. But we worked it all out with them and we became the guinea pig and so I think it's probably much smoother now.

Do you think there are more plans to do more modular projects in New York as a result of you paving the way?

Yeah definitely. There's a lot of interest in modular because people think it's much cheaper. It isn't much cheaper. It's maybe a little bit less expensive if it's done properly, but the real important thing is that the quality of the construction is much better. That's the key advantage. The disadvantages are what I'm talking about at the summit. Trying to get different people to hookup and put the pieces together on the site.

Is that going to be more of an issue now that a lot of fabricators are considering shuttering New York City locations due to associated expenses?

They're shuttering because nobody quite knows how to do it. There are also issues with the banks. The banks have to be willing to finance a project like this where a good portion of it will be in Pennsylvania, and they'll be making payments for a partially finished project - but it's not partially finished in place. It's partially finished in a parking lot in Pennsylvania. (...continued)



But the banks are interested in modular. There are a lot of issues that make it more complicated. Also, I think peoples' first impulse is that this is a product. You just buy it. 'Oh, you know, I have a site that's fifty feet wide. I'll buy so many units from the modular guy.' It isn't like that. It's off-site construction. It's not like buying a car. Every project is different. Every project has to be designed differently. And then it has to be pieced together in the factory.

The initial wave of enthusiasm for offsite construction in major urban areas seems to be calming due to some of these circumstances you're talking about. Do you see modular applications taking off in New York and other major US cities in the near future or will an incremental rollout across industries be necessary?



I think New York is probably most difficult to work with. What you need is an aggregated market. In order for the industry to operate and to be effective, it's got to know that they can produce so much product every year. Let me put it this way. In our case, the architect, contractor, and developer were the same entity, that's why we were successful.

If the developer were much larger and could assemble sites, then we could build over say a three or four or five year period – fill these sites, then it would work.
(...continued)

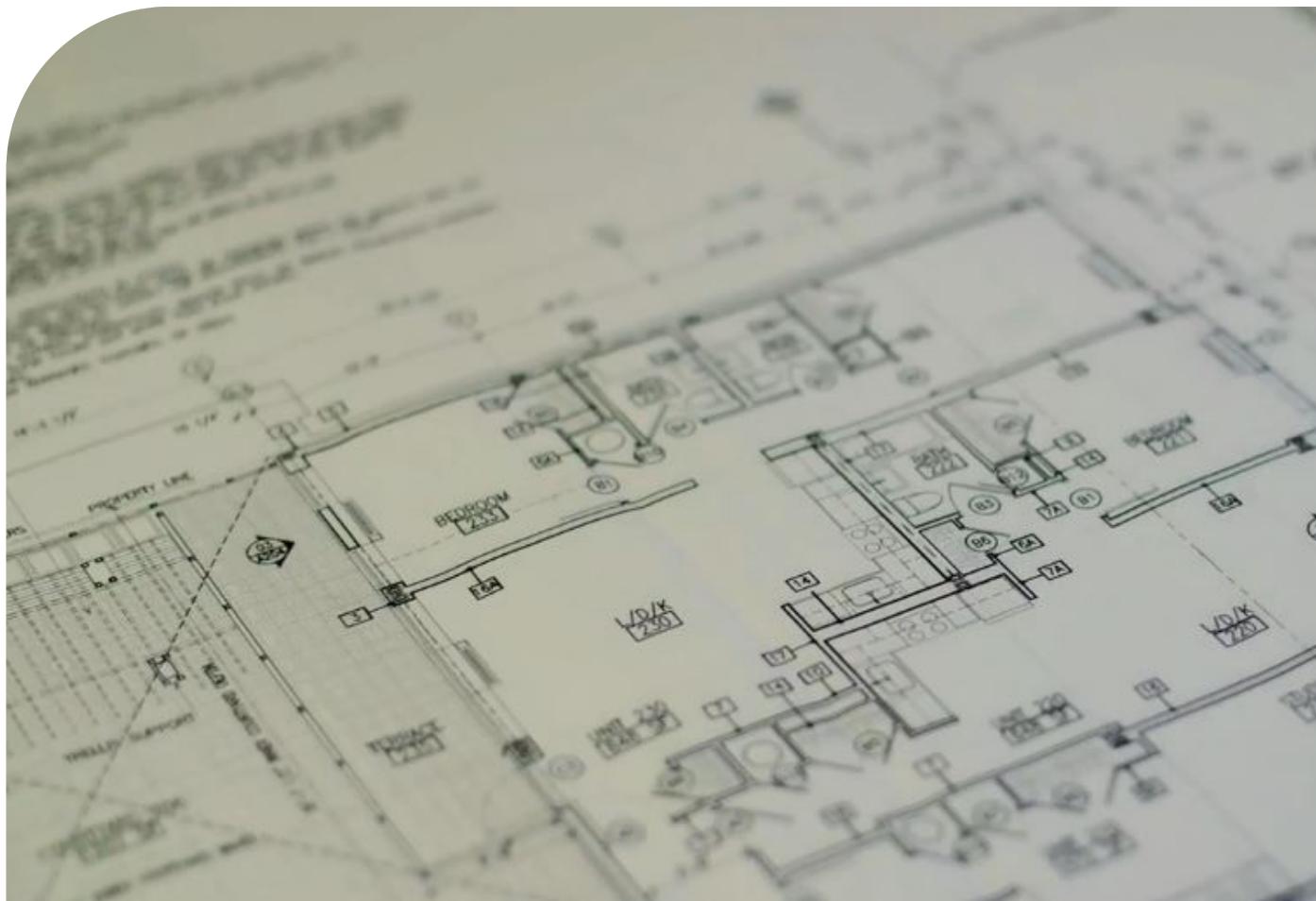
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But you can't have the siloed set of interests the way the process works now. An architect in his world. A contractor in his world. Engineers in their world. A developer in his world. The banks in another world. It's just a nightmare. It's an absolute nightmare. That's why it's so hard to get anything built.

Do you see that changing any time soon?

Yes it is changing. It's called design build. And it's changing the country quickly. But not so much in New York. The laws are kind of against it. And all the government work is against it. Out West, and lots of places in the country, it's just taking over construction one hundred percent. It makes so much more sense.



All images courtesy of Gluck+

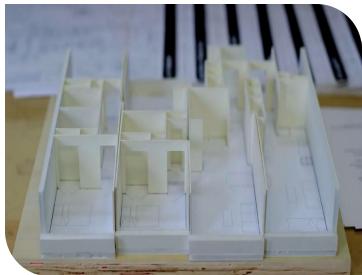


The Stack – interior. All images courtesy of Gluck+

Quick question about logistics. You had mentioned that you were lucky that to have a site open next to the one you were working on. What would you have done if there wasn't a site available next to it?

You can set up in the street. There are ways of doing it. One of the advantages of the modular work is that the city would be encumbered for a couple of weeks as opposed to a normal construction site for a little crummy building would have the street all messed up for eighteen months.

So the communities love this project. They're excited by it. We were a little bit fearful in the beginning that they would have the assumption that the modular work would be kind of crummy and not high quality, but that wasn't it at all. They were all excited and interested about it. It seemed like something special and something forward looking and we were really surprised at everybody who walked by it about their attitude towards it. Everybody who lives in it loves it. One of the advantages is that it's much more quiet because there is duplication of walls and duplication of systems, which makes the soundproofing extraordinary relative to normal construction.



Shifting gears a little bit, could you suggest the best practice for owners in dealing smoothly with their architects?

At Gluck+ we're committed to not being just architects. And the reason we're committed to that is that we just don't think as an architect alone you can really understand all the issues involved. You can't just design it without spending a lot of time in the construction world and without assuming more responsibility. You can't, as an architect, avoid responsibility of construction of your buildings.

Well, you can, but you shouldn't.

They do. They all do. But it just seems to not make too much sense to us. Maybe we're crazy.

If you are, it seems to be working out. So, the big question – how do you think the Stack's success as a modular, offsite project affect the construction industry as a whole?

If you start with the assumption that modular construction is simply off-site construction, it's not like a product that you buy and set in place, then more and more of the constructing and the building is going to be done off site. Their bathroom modules are being made, there are whole wall systems that are being made. More and more is being constructed off-site just because it makes more sense. Whether the whole apartment unit is built off-site, even in our case the entire apartment unit was not built because the apartments would weave through the different modules. So, off-site construction I think is going to become more and more efficient and more and more prevalent.

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Gluck+



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So you're optimistic? You think these issues are mainly growing pains?

When I say offsite construction, I mean wall systems, bathroom systems... There are some really interesting new concrete slab systems that are prefabricated. The more you build offsite the more it makes sense. So it doesn't necessarily have to be the whole box. So I'm very optimistic about more and more being built offsite. All of which takes more coordination and cooperation and responsibility between all the players in the system as opposed to the idealized idea of an apartment being flown into the space and set on top of another one, which is kind of a comic book idea. These ideas have been in play for 40 years and the only place they really did it a lot was in, say, Russia, where they aggregate sites. They knew they had to build 3000 of these things so they could do it. Our system doesn't work that way - we have ups and downs and different requirements.



CASE STUDY: The Stack

May 24 – 11:30 AM

Peter Gluck

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GLUCK+



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The way the system works now, with the silos of interests, it's impossible to get anything done. The risk management is just insane so everyone's worried about their own risk. The potential savings by risk management are multiplied by the actual cost probably by 300%, so there's such a huge amount of waste in this system. We feel really strongly that you can't be afraid of risk, you have to accept the risk and you have to work together not as separate entities. And it's already happening, in many different ways.

- Peter Gluck



What do you have to add to the discussion?

Join professionals like Peter at the [Offsite Construction & Prefabrication Summit](#), this May 23 - 25 in New York City, and take part in discussions which will shape the industry for years to come.

DOWNLOAD THE AGENDA

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