

Good morning, everybody. Dennis Engelbrecht, Digging Deeper.

Today, I want to talk about what probably all of you out there are facing, which is obviously supply lows and higher prices. And gosh, construction just seems to get more and more challenging, and I'm sure you're feeling that. So, thinking about answers, lean construction's been a buzzword around now for quite a few years. And as we're here today and you think about particularly the supply chain woes and issues, there really has never been a better time to learn lean, adopt lean, put it into practice. All right? So, I really want to encourage you for that.

If you want to get into it, this book, *The Lean Builder*, highly recommend this to each of you. Get a copy of it, get all of your superintendents a copy of it. Whether you go all in on lean and you're a big believer or not, that book will help your folks. It's a very easy book to read, very folksy, tells the story of a superintendent and a project manager sort of learning lean on the fly on a job site, and a very good book.

But back to my point, my point here is that the principles and practices of lean are really what you need today to make sure that you can manage the supply chain challenges and difficulties that we have today. The whole idea behind pull planning is to be able to look at these things long into the future and make sure that the things you need for construction are lined up in the proper order to get things done efficiently. And with the supply chain woes we have today, a lot of these things have moved around, and you have to be very creative to get a plan, to make it all come together and work together.

Some of the other principles and practices, daily huddles, because things change so much. Yes, we were expecting something to be delivered this week, but then we found out there is a shortage of trucks and couldn't get it to the job site. Lo and behold, we got to move and change. So, those daily huddles and the visual communication tools that come with lean are very effective in reaction, last minute changes, getting the whole rest of the schedule back in alignment with those changes, all of that works well. Managing constraints, the constraints log, another huge tool in the lean system. And you can see very well that there are a lot of constraints today, and we have to manage those very actively and very effectively, and we have to know what they are. And again, we have to plan for them and around them, so the lean system helps with that.

And then, just finally eliminating waste and having high productivity on your job sites. Interestingly enough, construction, commercial and institutional construction has stayed pretty much flat through the COVID period, between two years ago to last year. And this year, we're basically looking at flat in construction, however, employment in construction, commercial and institutional is down about 5.5% yet, and we have not recovered the employees. Well, what does that mean? That means we have to be more productive with the employees we have. We have to get more out of everybody's time and day. And again, having a great system, eliminating the waste, having high productivity and using the lean system is one methodology to get there.

So obviously, AGC offers a great lean program. That's something that you can take online, in-person, read the book I told you, *The Lean Builder*. Get started today. Never been a better time to learn lean and implement lean.

Again, Dennis Engelbrecht. Thanks for tuning in.