

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SIMPSON STRONG-TIE COMPANY, INC.

Petitioner

v.

COLUMBIA INSURANCE COMPANY

Patent Owner

Case PGR2024-00050

Patent 11,920,339

DEPOSITION OF MATTHEW S. CHURCH, PE, SE

TAKEN ON BEHALF OF THE PETITIONER

AUGUST 8, 2025

(Starting time of the deposition: 9:01 a.m. CT.)

Simpson Strong-Tie Company EX1057
Simpson v. Columbia
PGR2024-00050

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QUESTIONS BY:

PAGE

MS. HOLOUBEK

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E X H I B I T S

EXHIBIT

PAGE

Exhibit 2056 Matthew Church declaration

7

(The exhibit was retained by Counsel.)

1 UNITED STATES PATENT AND TRADEMARK OFFICE

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3 BEFORE THE PATENT TRIAL AND APPEAL BOARD

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5 SIMPSON STRONG-TIE COMPANY, INC.
6 Petitioner

7 v.

8 COLUMBIA INSURANCE COMPANY
9 Patent Owner

10 Case PGR2024-00050
11 Patent 11,920,339

12 DEPOSITION OF MATTHEW S. CHURCH, PE, SE,
13 produced, sworn and examined on August 8, 2025,
14 between the hours of nine o'clock CT in the forenoon
15 and eleven o'clock CT in the forenoon of that day,
16 at the law offices of Stinson LLP, 7700 Forsyth
17 Boulevard, Suite 1100, St. Louis, Missouri 63105,
18 before William L. DeVries, a Certified Court
19 Reporter (MO), Registered Diplomate Reporter, and
20 Certified Realtime Reporter, in a certain cause now
21 pending in the United States Patent and Trademark
22 Office, Before the Patent Trial and Appeal Board,
23 between SIMPSON STRONG-TIE COMPANY, INC.,
24 Petitioner, vs. COLUMBIA INSURANCE COMPANY, Patent
25 Owner; on behalf of the Petitioner.

A P P E A R A N C E S

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William L. DeVries, RDR/CRR
Missouri CCR #566

1 IT IS HEREBY STIPULATED AND AGREED by
2 and between counsel for the Petitioner and counsel
3 for the Patent Owner that this deposition may be
4 taken in shorthand by William L. DeVries, RDR/CRR, a
5 Certified Court Reporter and Certified Shorthand
6 Reporter, and afterwards transcribed into
7 typewriting; and the signature of the witness is
8 expressly reserved.

9 * * * * *

10 MATTHEW S. CHURCH, PE, SE,
11 of lawful age, produced, sworn and examined on
12 behalf of the Petitioner, deposes and says:

13 (Starting time of the deposition: 9:01 a.m.)

14 COURT REPORTER: Do you swear or affirm
15 that the testimony you are about to give in this
16 proceeding will be the truth, the whole truth, and
17 nothing but the truth?

18 THE WITNESS: Yes.

19 EXAMINATION

20 QUESTIONS BY MS. HOLOUBEK:

21 Q. Good morning.

22 A. Hi.

23 Q. My name is Michelle Holoubek, and I'll
24 be taking your deposition today. Can you please
25 state your full name and address for the record?

1 A. Matthew Church. 5490 Avonshire Lane,
2 Cumming, Georgia 30040.

3 Q. Thank you, Mr. Church. You understand
4 that you are here today to have your deposition
5 taken in connection with testimony you provided in
6 post-grant review proceeding challenging U.S. Patent
7 Number 11,920,339; is that correct?

8 A. Correct.

9 Q. Okay. And I'm going to refer to the
10 challenged patent by its last three digits, so just
11 the '339 patent. Is that okay?

12 A. Yes.

13 Q. Okay. Just a couple of ground rules.
14 We already talked about not speaking over each other
15 so the court reporter can get everyone's testimony.
16 That includes no nonverbal answers. All your
17 answers have to be verbal so that they can be
18 recorded. Will you tell me if you don't understand
19 my question?

20 A. Yes.

21 Q. Okay. And if you don't ask for
22 clarification, I'll assume you understood my
23 question. Is that okay?

24 A. Okay.

25 Q. Okay. Any reason that you cannot

1 testify truthfully today?

2 A. No.

3 Q. Okay. Are you under any medication
4 that may impair your testimony in any way today?

5 A. No.

6 Q. We'll take breaks if needed and let me
7 know if you need a break, but we can't take a break
8 while a question is pending. So we have to answer
9 all outstanding questions before we take a break.
10 Is that understood?

11 A. Okay. Yes.

12 Q. Okay. And let's proceed. I'll go
13 ahead and hand you what's been previously marked as
14 Exhibit 2056.

15 (Exhibit 2056, Matthew Church
16 declaration.)

17 Q. (By Ms. Holoubek) Mr. Church, do you
18 recognize this document?

19 A. Yes.

20 Q. What is this document?

21 A. It's my declaration.

22 Q. And if you turn to page five, is that
23 your signature at the end of page five?

24 A. It is.

25 Q. Okay. And you signed this declaration

1 on May 22nd, 2025; is that correct?

2 A. Correct.

3 Q. Okay. What did you do to prepare for
4 today's deposition?

5 MR. SCHROEDER: Real quick, I just want
6 to object to the question to the extent that it
7 calls for divulging any attorney-client
8 communications, but otherwise you may answer.

9 A. I read through my declaration.

10 Q. (By Ms. Holoubek) Okay.

11 A. Met with the attorney and did the exact
12 same thing.

13 Q. Okay. Which attorney did you meet
14 with?

15 A. Eidson. Scott Eidson.

16 Q. Uh-huh. Okay. Did you also meet with
17 Mr. Schroeder?

18 A. I don't think so.

19 Q. Okay. You mention you had read through
20 your declaration. Did you review any other exhibits
21 or other document?

22 A. Yesterday or prior to yesterday?

23 Q. Let's start with yesterday.

24 A. No. We just reviewed the declaration.

25 Q. Okay. Prior to yesterday to prepare

1 for today's deposition did you review any other
2 documents?

3 A. I went and looked back at my history to
4 try and remember. It's been so long as to like the
5 sequence of events. I -- I did that when I wrote
6 this as well, but I was just trying to get prepared
7 to make sure I knew -- understood the timeline as
8 best I could.

9 Q. Okay. Okay. And when you say you
10 reviewed things, what did you review to prepare for
11 the deposition?

12 A. Well, as I say here in my declaration,
13 I traveled extensively with Woodworks from early
14 2000s to probably 2014 roughly and I did a lot of
15 seminars. And those seminars are referenced in the
16 declaration.

17 And I just went back and reviewed those
18 to, you know, get familiar again because they were
19 long seminars. You know, all the information that
20 we discussed so it would be fresh in my mind. It's
21 been a number of years since I've done the seminars,
22 so --

23 Q. Uh-huh. And what was the general
24 subject matter of the seminars?

25 A. It was basically explaining the

1 challenges associated with wood-frame multifamily
2 construction, particularly Type V and Type III
3 construction.

4 Q. Uh-huh. Okay. And are those the --
5 the seminars that the topic of discussion -- I don't
6 think the word seminars is used, but the discussions
7 that are referred to in paragraph 11 of your
8 declaration?

9 A. That's correct.

10 Q. Okay. Outside of that seminar history,
11 did you review anything else to prepare for today's
12 deposition?

13 A. Not that I can think of.

14 Q. Okay. How about when you prepared the
15 declaration, I know it's been a few months since
16 then, but what documents did you review to prepare
17 the declaration?

18 A. The same thing I mentioned to you. I
19 went back and looked at my seminar notes and
20 PowerPoint presentations just -- yeah, to just
21 refresh my memory of what our discussions were,
22 what -- what we were talking about at the time, what
23 the challenges were at the time. We've come a long
24 way since then in large part as a result of what
25 we're here to talk about today. So I had to go back

1 and just kind of refresh my memory on the sequence.

2 Q. Okay.

3 A. Yeah.

4 Q. When you were preparing your
5 declaration did you talk with anyone as part of the
6 declaration preparation?

7 MR. SCHROEDER: Just real quick, I'm
8 going to again remind the witness, you know, not to
9 divulge any communications with counsel, but
10 otherwise you may answer.

11 A. Could you ask the question again?

12 Q. (By Ms. Holoubek) Sure. Actually, I
13 don't remember the phrasing. Can the court reporter
14 please repeat it?

15 COURT REPORTER: Question: When you
16 were preparing your declaration did you talk with
17 anyone as part of the declaration preparation?

18 MR. SCHROEDER: And I should clarify
19 when I say divulge communications, it's the content
20 of the communications.

21 A. Yes. I spoke with the Stinson
22 attorneys.

23 Q. (By Ms. Holoubek) Okay. Do you
24 remember which Stinson attorneys?

25 A. There were a few, and I don't recall

1 their names off the top of my head, but -- yeah, I
2 don't remember the names.

3 Q. Okay. Did you speak with anyone from
4 MiTek to prepare your declaration?

5 A. Not to prepare my declaration, no.

6 Q. Had you spoken with people from MiTek
7 for purposes other than your declaration?

8 A. Yes. All the time.

9 Q. Okay. That is just part of your course
10 of business?

11 A. Correct. Yeah.

12 Q. Okay. We were talking about documents.
13 Did you ever review the '339 patent?

14 A. No, I've never seen the patent.

15 Q. Okay. How did you learn -- well, let
16 me rephrase the question. How did you learn about
17 the '339 patent?

18 MR. SCHROEDER: Objection, vague, but
19 you may answer.

20 A. To the best of my recollection, I think
21 when they reached out to me about the challenge.

22 Q. (By Ms. Holoubek) Okay.

23 A. I don't think I knew about it before
24 then actually.

25 Q. Okay. And when were you engaged by

1 MiTek or Columbia Insurance?

2 MR. SCHROEDER: Objection, assumes
3 facts not in evidence.

4 Q. (By Ms. Holoubek) Okay. Were you
5 engaged by MiTek or Columbia Insurance Company for
6 this declaration?

7 A. The first -- the first communication or
8 connection was through MiTek, which was simply would
9 you be willing to talk to the attorneys.

10 Q. Okay. And about when did that happen?

11 A. Around the same time as, you know,
12 maybe a few weeks before the declaration, somewhere
13 in that -- same time frame.

14 Q. Okay. Looking at paragraph one of your
15 declaration, you say that you're a senior principal
16 at Davis & Church; is that correct?

17 A. That's correct.

18 Q. What type of services does Davis &
19 Church provide?

20 A. Structural engineering.

21 Q. Okay. And you've been with them since
22 2004; is that correct?

23 A. I'm a co-founder of the company,
24 established in '03, September of '03.

25 Q. Okay. Okay. And does your role at

1 Davis & Church involve any experience with firewall
2 assemblies?

3 A. Yes.

4 Q. And you mention in paragraph three that
5 Davis & Church has particular experience in the
6 design-build industrial sector and the
7 mixed-use/multifamily sector. Can you describe what
8 each of those sectors refers to?

9 A. Well, the first part of that,
10 design-build, is really just the process and how the
11 project evolves and it primarily work through the
12 contractor. So we'll oftentimes be prime in a
13 design-build environment. Whereas, in the
14 mixed-use/multifamily we work almost exclusively as
15 a consultant and where the architect is the prime
16 and we're the consultant to the architect.

17 Q. Okay. So the design-build, does that
18 mean you have a team of architects that come up with
19 the initial design and then you -- so maybe you can
20 explain to me what you mean by --

21 A. It's the reverse. So what you're
22 describing there is typical in the
23 mixed-use/multifamily environment where you have
24 architects who create the conceptual design and hire
25 consultants to basically, you know, design the

1 structure, the mechanical, electrical, plumbing, and
2 that sort of thing.

3 In the design-build industrial
4 environment the contractor is more in the lead and
5 hires the structural engineer to be prime and in
6 those particular projects we would then hire the
7 architect as a consultant and the MEP engineers as
8 consultants, but we would be prime and be lead.

9 Q. Okay. And where does your experience
10 with firewall assemblies come in?

11 A. My experience is in the
12 mixed-use/multifamily arena. Yeah.

13 Q. Okay. In paragraph two you mention
14 that you spend -- you mentioned that you spent four
15 years as a structural engineer at SCA Consulting
16 Engineers, correct?

17 A. Correct.

18 Q. When were those four years?

19 A. Well, that was my first job out of
20 school, out of college. So that was '95 -- summer
21 of '95 to summer of '99.

22 Q. Okay. Did you work with firewall
23 assemblies while you were at SCA Consulting?

24 A. Yes.

25 Q. In what context?

1 A. Well, they were part of the project. I
2 didn't choose the firewall assembly, but I had to
3 work with the firewall assembly and what made up the
4 assembly, its constraints relative to the structure.

5 So I had to understand the firewall
6 assembly and the needs, the different pieces and
7 parts and the need for those pieces and parts so
8 that I could work my structure around it or with it
9 and still meet the code requirements.

10 Q. Okay. You mentioned you also spent
11 four and a half years as a senior structural
12 engineer with The Preston Partnership. When was
13 that?

14 A. That was summer of '99 through the end
15 of 2003.

16 Q. Okay. And did your work as a
17 structural engineer with The Preston Partnership
18 involve firewall assemblies?

19 A. It did.

20 Q. In what context?

21 A. The same context as before.

22 Q. Okay. And what were your general roles
23 as -- excuse me, as a structural engineer?

24 A. Could you clarify that question?

25 Q. Sure. What were your general

1 responsibilities as a structural engineer?

2 A. Well, to collaborate with the design
3 team, the architect and the other engineers and
4 design a structural system that worked efficiently
5 with everything architecturally and everything
6 mechanically and electrically and plumbing.

7 Q. And was it common for structural
8 engineers to be familiar with the requirements for
9 firewall assemblies?

10 A. It depended on your role. Being a
11 senior engineer and especially a little bit later,
12 probably getting ahead of myself here, but as I did
13 more and more seminars --

14 Q. Uh-huh.

15 A. -- as I did more teaching of younger
16 engineers, had more responsibilities of a team, it
17 became more and more important for me to understand
18 the specifics of the firewall because of their
19 interaction with the structure. It was critical as
20 to whether or not the firewall maintained its rating
21 or not.

22 Q. Would you not have had those
23 understandings before you started your teaching and
24 training?

25 A. Not to that degree. Architects specify

1 the fire-rated assemblies primarily, and that's --
2 that's sort of their area or their scope, but we
3 can't turn a blind eye to that and think that we can
4 just do whatever we want without jeopardizing the
5 firewall assembly potentially. So the more
6 responsibility I had, the more I needed to
7 understand what the pieces and parts were and what
8 their role was.

9 Q. Uh-huh. So is it the architects who --
10 who specified exactly which components would go into
11 the firewall assembly?

12 A. Well, the assembly itself is a rated
13 assembly, and generally, for example, it would be a
14 UL-listed assembly. And so those pieces and parts
15 are already defined within the assembly.

16 You can't pick and choose and still
17 reference that assembly for the building officials
18 to see and agree or disagree with it. You choose an
19 assembly and you primarily stuck with whatever the
20 limitations are within that assembly.

21 Q. Okay. In paragraph three and four
22 you're referring to I guess -- you're referring to
23 multifamily construction. Does that include
24 wood-frame construction?

25 A. It does.

1 Q. How long has wood-frame construction
2 been used in multifamily residential buildings?

3 A. As long as I can remember I've -- I've
4 worked construction. Some of my first jobs in high
5 school were construction and we did wood-frame
6 single-family and multifamily construction. So I
7 can't remember a time that it wasn't.

8 Q. And would those earlier wood-frame
9 constructions that you remember, would they also
10 have firewall assemblies in them?

11 A. I don't think I really became familiar
12 with firewall assemblies, period, probably until I
13 got to college. Maybe even like graduate level. I
14 don't think I ever really noticed it or it was ever
15 pointed out to me, no. So it would have been pretty
16 far along in my education.

17 Q. Okay. Are you aware of firewall
18 assemblies having been constructed with wood-frame
19 walls prior to when you started seeing them in the
20 nineties?

21 A. Could you ask that question again?

22 MR. SCHROEDER: Yeah, I was going to
23 object to form.

24 Q. (By Ms. Holoubek) Sure. So you
25 mentioned you didn't have experience with firewall

1 assemblies in wood-frame construction until the
2 mid-nineties; is that fair?

3 A. I didn't understand them or know about
4 them. I might have actually worked on a firewall
5 when I was a teenager and didn't know it. I don't
6 know.

7 Q. Is it fair to say that firewalls and
8 wood-frame construction existed before the
9 mid-nineties?

10 A. Probably, but I don't know.

11 Q. Okay. In paragraph six you refer to
12 the International Building Code; is that correct?

13 A. Yes.

14 Q. Is it okay to shorten that to the IBC?

15 A. Sure.

16 Q. Great. Are there other building codes
17 that are relevant to multifamily construction?

18 MR. SCHROEDER: Objection, vague. You
19 may answer.

20 A. Yes. Primarily it's the International
21 Building Code today, but when I started my career
22 and worked in multifamily from the beginning, there
23 were multiple codes, building codes that, you know,
24 provided guidance on multifamily construction, wood
25 frame.

1 Q. (By Ms. Holoubek) When you started
2 working in the industry what was the general
3 location that you worked in?

4 A. Well, I started in Texas. I would say
5 the majority of our multifamily projects were in
6 Texas, but I worked on projects all over the
7 country. It was just the majority of them were
8 probably in Texas.

9 Q. Okay. Do you recall what building
10 codes governed those projects?

11 A. Sure. Uniform Building Code. BOCA was
12 another one. The Standard Building Code. Those are
13 the three that come to mind.

14 Q. And those building codes would have
15 different requirements in different scenarios; is
16 that correct?

17 A. They could. They were very similar,
18 but they would have -- they would be unique, yes.

19 Q. How -- for a given project how would
20 you decide which building code to operate under?

21 A. I didn't make that decision. That's a
22 local jurisdiction decision. So in those days it
23 was very common in the beginning, the very first
24 thing you did was reach out to local jurisdiction
25 and find out what code they were under.

1 Q. The local jurisdiction would decide the
2 code?

3 A. They would adopt the code.

4 Q. You would construct the building under
5 that code?

6 A. Correct.

7 Q. In that paragraph you refer to Type V
8 and Type III wood-framed buildings. For the court
9 reporter, those are roman numerals. What's the
10 difference between a Type V and a Type III
11 wood-framed building?

12 A. So that's referring to the
13 International Building Code's definition of
14 construction type. So Type V, the way the
15 international code refers to it is it's basically a
16 building that can be built with any approved
17 material in the code, combustible or not.

18 And so the majority of multifamily
19 construction is built under Type V construction as
20 the International Building Code defines it. Type
21 III is unique when it comes to multifamily
22 construction.

23 Type III is very similar to Type V,
24 except that the exterior wall is required to be
25 noncombustible. However, there is an exception that

1 allows -- or I shouldn't say an exception.

2 There is an allowance in Type III for
3 fire-retardant treated lumber to be used in the
4 exterior wall assembly, and that allowance is what
5 led to the Type III construction, multifamily Type
6 III construction that we know today.

7 And Type III, I guess the advantage
8 with Type III multifamily is that it allows you to
9 increase the height of your building, number of
10 stories of your building over Type V. Type V would
11 generally limit you to four stories. Type III would
12 allow you to go to five stories.

13 Q. Why was Type V limited to four stories?
14 Did you say four stories?

15 A. Correct. Well, it's -- it's fire. I
16 mean, it's the concern with fire, fire rating,
17 sprinkler systems, and so forth. So without going
18 into my understanding of the history of Type III and
19 Type V, it really just has to do with fire
20 protection.

21 Q. Okay. So is Type V construction --
22 well, let me back that question up.

23 Back in the 2013 time frame was Type V
24 or Type III more commonly used?

25 A. For multifamily Type V is more commonly

1 used. It's still that way today simply because it's
2 less expensive and more of your multifamily
3 construction is -- is Type V, is four stories or
4 less.

5 Q. Okay. And you mentioned that Type V
6 construction could be built with combustible
7 material; is that correct?

8 A. Correct.

9 Q. So combustible material refers to
10 wood-frame exterior walls?

11 A. Wood frame all walls.

12 Q. Okay.

13 A. Walls, floors, roofs, everything can be
14 combustible.

15 Q. Okay. And then in Type III
16 construction the exterior walls have to be
17 noncombustible?

18 A. Noncombustible.

19 Q. And that noncombustible, though, could
20 include fire-retardant treated lumber?

21 A. Correct.

22 Q. Otherwise it would include things like
23 concrete or masonry walls?

24 A. Generally not multifamily construction.
25 That's the big advantage of Type III and wood frame

1 with the allowance for FRT is you can get the extra
2 story and still build it entirely out of wood by
3 using the allowance for FRT.

4 And the reason that's important is
5 because wood shrinks. Concrete and masonry do not.
6 And it -- it makes the interaction between the wood
7 and the noncombustible requirement a bigger
8 challenge when it can't be wood.

9 Q. Because the components would shrink at
10 different rates or --

11 A. If the exterior wall was metal stud or
12 concrete or masonry or something else it wouldn't
13 shrink, and so you would end up with some real
14 difficulties. Not to mention the fact it's much
15 heavier and so that would increase the seismic mass
16 of the building and increase your loads.

17 Early on right around the adoption of
18 the 2000 International Building Code, just prior to
19 that there was no allowance for FRT in the exterior
20 envelope. And so we were designing Type III -- what
21 we call Type III today, coincidentally, was called
22 Type V under the standard building code.

23 Prior to the international code coming
24 on board there wasn't an allowance for FRT and so
25 the projects that we built back then were built with

1 metal studs as the exterior envelope to meet the
2 noncombustible requirement. And so we were
3 challenged as I said before with that interaction
4 between walls and -- you know, interior walls that
5 would shrink and exterior walls that would not.

6 There was even a noncombustible
7 requirement for the interior walls on the bottom one
8 or two floors depending on how many stories it was.
9 So when the international code came along and Type
10 III provided that allowance for FRT, it changed
11 significantly how those buildings were built.

12 Q. Before the International Building Code
13 came along was gypsum used as part of the wall
14 assembly?

15 A. Gypsum has always been used as part of
16 the wall assembly as far back as I can remember.

17 Q. Would it have been used on exterior
18 walls?

19 A. Sure. Still is.

20 MR. SCHROEDER: Going to object to
21 vague on that one.

22 Q. (By Ms. Holoubek) Okay. So was -- was
23 gypsum used on -- I don't remember what -- what was
24 the question?

25 COURT REPORTER: Question: Would it

1 have been used on exterior walls?

2 Q. (By Ms. Holoubek) I'll rephrase.

3 Would gypsum have been used on exterior walls?

4 A. Yes.

5 Q. You mentioned the IBC coming along in

6 2000. Were there versions of the International

7 Building Code before 2000?

8 A. No.

9 Q. Okay.

10 A. That was the first -- first edition.

11 Q. Okay. And in its first edition did the

12 IBC include a section on fire-rated wall assemblies?

13 A. I'm sure there's a section in the
14 2000IBC on fire-rated wall assemblies. I haven't
15 looked at the 2000IBC in a number of years, but my
16 experience would suggest that, yes, there were.

17 Q. And was there a 2012 version of the IBC
18 that came out?

19 A. Yes.

20 Q. Is that the one that you refer to in
21 paragraph six which talks about a minimum two-hour
22 fire resistance?

23 MR. SCHROEDER: Objection, form.

24 Q. (By Ms. Holoubek) I can rephrase. So
25 in paragraph six you talk about the Type V and Type

1 III constructions needing to carry a two-hour
2 fire-resistance rating; is that correct?

3 A. Correct.

4 Q. And so was that specified -- you say
5 that was specified in the IBC. Do you remember
6 which version of the IBC you're referring to?

7 A. Well, as early as I was talking about
8 these subjects in my seminars. That would have been
9 as early as the 2006 International Building Code.
10 So I can say with pretty good surety, yes, it goes
11 back that far. Again, I can't remember -- there was
12 a 2003 and a 2000. I don't remember the exact
13 wording or verbiage to know. They're constantly, as
14 you know, improving the code.

15 Q. Yeah. Yeah. Okay. But safe to say
16 that at least as of 2006 there was a requirement for
17 a two-hour fire-resistant rating; is that right?

18 A. Yes.

19 Q. Okay. Now, before 2006 the -- the
20 hangers that -- that you talked about, the FWH
21 hanger weren't around. So -- so really prior to
22 2012, 2013 how did you construct fire-rated wall
23 assemblies that satisfied this two-hour fire rating?

24 A. Okay. So --

25 MR. SCHROEDER: I'll object to form,

1 but you may answer.

2 A. Are we talking about exterior walls?

3 Q. (By Ms. Holoubek) Any wall that was
4 required to carry a two-hour fire-resistance rating.

5 A. Okay. That's an important distinction
6 to me anyway.

7 Q. Can I ask why? What's the importance
8 of the distinction between exterior and interior
9 walls, firewalls?

10 A. So in the context of what I'm talking
11 about here in my declaration, and I think I -- I
12 think I clarified it in here, but there are
13 firewalls and there are fire barriers, and by code
14 those are -- those are different.

15 Q. What's the difference between them?

16 A. Well, a firewall assembly has to run
17 all the way up the building vertically
18 uninterrupted, and it has its own requirements, code
19 requirements. The fire barrier is exactly that, a
20 fire barrier that runs from floor to floor. And so
21 when we're talking about exterior walls and Type III
22 construction, we're talking about fire barriers.

23 Q. Okay.

24 A. When we're talking about the building
25 being so large that it needs a firewall separating,

1 you know, different areas of the building, that's a
2 continuous firewall, that would not -- that doesn't
3 come into play when it comes to fire hangers because
4 we're not bearing on that particular wall typically
5 because that firewall is independent. It's an
6 independent element.

7 In Type V construction a firewall would
8 be made of a gypsum liner panel, and that's the --
9 that's the assembly is just the gypsum liner panel
10 that runs full height independent of the framing on
11 either side of it.

12 When we're talking about a fire barrier
13 like the exterior wall in Type III construction or a
14 stairwell wall in Type V and Type III, you're
15 talking about an assembly that is inclusive of the
16 wood framing. So the stud walls are part of the
17 assembly.

18 When the stud walls become part of the
19 overall assembly, that's where the hanger comes in
20 as being important because we're framing to the
21 actual assembly, wherein a firewall you're not.

22 The -- the assembly is just either the
23 gypsum panel or aerated concrete panel or whatever
24 they're using to meet the rating, that's independent
25 of the actual framing and it runs uninterrupted.

1 Q. Okay. So you wouldn't have hangers on
2 a firewall is what you're saying?

3 A. Correct. Typically no.

4 Q. Okay. Okay. So the term firewall
5 hanger is probably incorrect. It should be
6 fire-barrier hanger?

7 A. Yes.

8 Q. Thank you for that clarification. I
9 guess maybe then in constructing a fire barrier that
10 runs floor to -- floor to floor, say back in the,
11 you know, late nineties, early 2000s, did you use
12 hangers at all on firewall -- or fire-barrier
13 assemblies?

14 A. It's hard to remember that far back
15 what our design approach was and what the -- what
16 the specific code requirements were because as I
17 said, they -- they are constantly evolving. I'm
18 trying to think of projects that far back and what
19 we did as it relates to the exterior envelope.

20 Again, the exterior envelope going that
21 far back was oftentimes a noncombustible wall and
22 that was the requirement that you met.

23 Q. Uh-huh.

24 A. When it came to hangers, yes, we were
25 using hangers in combination with other components

1 to still maintain the rating of the wall -- of the
2 fire barrier. So I think that's yes to that
3 question.

4 Q. Okay. What were some of the other
5 components you would use with hangers?

6 A. So when it came to, for example, metal
7 studs, when we were doing metal stud framing before
8 the adoption of the -- of the IBC, we were -- one
9 common approach was to attach a wood ledger to the
10 face of the metal studs.

11 Again, you would -- you would take two
12 approaches and I think one of those approaches is
13 described in here in my declaration where in order
14 to maintain the rating you would pre-rock the wall
15 for the depth of the ledger by attaching the gypsum,
16 one or two layers, whatever the requirement was,
17 attaching it to the wall and then putting the ledger
18 on top of that and then you would attach the hanger
19 to the face of the ledger.

20 Now, in that case you didn't need a
21 special hanger because you're on the outside of the
22 fire rating and you're just attaching to the -- to
23 the ledger. And then the ledger's screw attachments
24 were doing the load transfer to the wall. So the
25 hanger -- in that case the hanger wasn't anything

1 special or unique.

2 The other approach was to -- instead of
3 using gypsum was to design a ledger that was large
4 enough or thick enough to meet what's called a char
5 rating, equivalent to whatever the rating
6 requirement was for the wall, and the gyp would run
7 to the bottom of that. You would attach your
8 framing to the ledger.

9 The ledger of course was attached to
10 the -- to the wall. And then you would pick back up
11 above the ledger and start your gypsum assembly
12 above that. So those were two common approaches
13 back in that period of time that we were taking with
14 metal studs.

15 Q. Were there any approaches that didn't
16 use ledgers?

17 A. Yes.

18 Q. At that time?

19 A. Yes. In fact, we -- we were not crazy
20 about the ledger approach. We didn't like it to
21 begin with. And so now you're -- now you're getting
22 into the period of time that I was starting to ask
23 for help in developing a connection, particularly
24 with a hanger that would span over two layers of
25 gyp.

1 Because this -- this started before the
2 adoption of the IBC, whether it was combustible or
3 noncombustible or wood or metal stud is we were
4 looking for a better connection. I didn't think
5 that the ledger connection was a very good
6 structural connection. I knew we could do better,
7 but I needed help in developing that connection.

8 Q. Okay. And so I think in paragraph nine
9 is where you were talking about some of these I
10 think you called them work-arounds in the last line
11 there; is that correct?

12 A. Yes.

13 Q. So one of the things you talk about in
14 paragraph nine that you had a scenario where it
15 says -- (quote as read):

16 We typically addressed this by running
17 only the base gypsum layer through a
18 one-hour rated floor/ceiling assembly
19 and using a top flange hanger like
20 Simpson's discontinued LBV series
21 designed to span over one layer.

22 So this means -- so the first layer of
23 gypsum board, would that cover the entire wall --
24 and actually, let me back up.

25 Is this talking about fire barriers or

1 firewalls?

2 A. Fire barriers.

3 Q. Fire barriers, okay. So in that fire
4 barrier would the first layer of gypsum cover the
5 entire wall?

6 A. Correct.

7 Q. Okay.

8 A. Up to the floor sheathing.

9 Q. You mean the floor that's above the
10 truss or the joist?

11 A. Correct.

12 Q. Okay.

13 A. It would extend over to the top of the
14 wall and so the gyp would stop at the bottom of the
15 sheathing, the next floor, the floor above, those
16 layers would start on top of the sheathing.

17 Q. You said you used a top planning hanger
18 designed to span over one layer, and you mentioned
19 the LBV series. So in -- in this assembly with the
20 LBV series or the LBV hanger was the base gypsum
21 board arranged between the back of the joist hanger
22 and the wall frame?

23 A. Correct.

24 Q. In nonfirewall construction the LBV
25 hanger would be flush against the wall frame, right?

1 A. Correct.

2 Q. So to install it here when you use it
3 in a rated wall or a fire barrier did you just
4 attach the top flange further out on the top plate
5 so there was a space behind the hanger for the
6 drywall?

7 A. So the LBV hanger required pre-rock as
8 well.

9 Q. Okay.

10 A. But it was the only hanger out there
11 that we knew of that spanned over a single layer of
12 gyp. You would still have to, like I said, pre-rock
13 it, but then at least you could have one layer run
14 continuous to the floor. So they would pre-rock it,
15 then attach the LBV hanger. And -- and we did that
16 quite a bit.

17 Q. So at that time did all hangers require
18 pre-rocking?

19 A. At that time I wasn't aware of any
20 hanger that didn't require pre-rocking. I should
21 say -- I should clarify. Any hanger that was
22 designed to span over gyp required pre-rocking.

23 Not all hangers could be used to span
24 over gyp. The LBV series was unique in that Simpson
25 had tested that for that particular condition over

1 one layer and it was both wood sheathing and gypsum
2 sheathing up to five-eighths of an inch.

3 Q. Okay. So when it spanned over wood
4 sheathing, so you would pre-rock and then you would
5 just attach the top flange kind of further out on
6 the top plate than if it was a flush mount?

7 A. Correct.

8 Q. Okay. You mentioned for -- for hangers
9 that would span there was pre-rocking. What did you
10 do when hangers could not span over a layer of
11 gypsum?

12 MR. SCHROEDER: Objection, vague. You
13 may answer.

14 A. I didn't use a hanger that couldn't
15 span over a layer of gypsum.

16 Q. (By Ms. Holoubek) Okay. So did you
17 ever attach a joist or truss to a wall and then
18 install gypsum around it?

19 A. I'm sure we've done that here and
20 there. More than likely we did that when we were
21 trying to fix something after the fact, not as a
22 method of construction from ground up, no.

23 Q. Okay. What if you had a situation --
24 just out of the firewall context, did you ever have
25 a building that was designed where the design of the

1 room was intended to have exposed beams?

2 A. Sure.

3 Q. In something like that you would
4 install the beams and framing and then cut the
5 drywall to fit around the beams; is that correct?

6 A. If local jurisdiction approved of that
7 approach, that could be done. It would oftentimes
8 require fire caulking all of those joints, which was
9 very expensive and labor intensive from the feedback
10 I received. So we, again, wouldn't take that
11 approach unless it was a fix after the fact to avoid
12 having to tear down a whole bunch of construction.

13 Q. Okay. And when you answered the
14 question, was that in the firewall context?

15 A. We're talking about steel fire
16 barriers.

17 Q. Fire barriers, okay. I want to return
18 to paragraph seven of your declaration. You mention
19 that manufacturers like MiTek and Simpson Strong-Tie
20 provide specialized joist hangers. Are there any
21 other manufacturers that provide joist hangers
22 useful for fire barriers?

23 A. It's a great question. I'm not aware
24 of any.

25 Q. Okay. For the MiTek hanger, the FWH

1 hanger, you said that's only used with fire
2 barriers; is that correct?

3 A. Correct.

4 Q. Okay. And then looking at paragraph
5 seven you're talking about horizontal framing. When
6 you refer to horizontal framing, are those just the
7 pieces of framing that run I guess parallel to the
8 ground?

9 A. Correct.

10 Q. Okay. When you say that (quote as
11 read):

12 You can install the hangers to support
13 same horizontal framing on beams
14 requiring a fire-rated encapsulation.

15 What is the difference between a fire
16 barrier and a fire-rated encapsulation?

17 A. Yeah. So this -- this is where at some
18 point in my declaration I use the reference -- I
19 think the choice of words I used was game changer.
20 So when MiTek developed the FWH series hangers, it
21 not only addressed the challenges we were having
22 with Type III exterior fire barriers, the fact that
23 it didn't require pre-rock allowed us immediately to
24 address the challenges we were having with
25 stairwells that required the two-hour fire barrier

1 and the individual encapsulation for primary members
2 as the code defines them in buildings that required
3 an encapsulation -- a rated encapsulation.

4 So an example of this would be a steel
5 beam in a wood-framed building that's supporting
6 multiple walls above. That member would be
7 classified as a primary member and would require a
8 certain fire rating and typically in multifamily it
9 would be a one-hour fire encapsulation.

10 In order to achieve that, you have just
11 a couple ways to do it, and the most common one that
12 I'm aware of is to wrap it with gyp, a layer of
13 five-eighths gypsum.

14 When the FWH hanger came out, being
15 able to attach that to nailers that ran along the
16 top of the steel beams and not have to pre-rock, not
17 have to wrap that, not have to encapsulate it
18 basically until gypsum came into the building, to
19 drywall and so forth, was huge because now they
20 could just frame it and not really even think about
21 what they had to do relative to the fire
22 encapsulation, the fire rating requirements.

23 Framers could just stick to what they
24 do and that's just frame the building because the
25 hanger would provide that room around those primary

1 members. Same thing with stairwells and vertical
2 stairwell barriers.

3 We could do that with wood-framed
4 stairwell walls, provide the barrier, but they
5 wouldn't have to pre-rock anything. They could just
6 stick to framing it. And the great thing about the
7 FWH hanger was that it had full capacity with or
8 without the gyp. It didn't matter.

9 So we didn't have to take any kind of
10 reduction. We could just use the hanger and let the
11 framers just frame the building and worry about the
12 gypsum when it came time to bring gypsum into the
13 building.

14 Q. You mentioned as part of that, so you
15 had a steel beam, for example. So you said steel
16 beam and a wood-frame building. So how does that
17 work if it's a -- is it -- so it's not a fully
18 wood-frame building if it's got steel beams, right?

19 A. So it's a wood-frame building, but
20 especially when we're talking about Type III
21 construction when you're trying to go taller and
22 you're trying to build larger, more attractive, and
23 urban buildings, you're trying to create open
24 spaces.

25 Particularly on the lower levels,

1 whether it's amenity, leasing, retail, whatever it
2 is on the ground level you're trying to create these
3 mixed-use spaces in an urban environment as well as
4 residential.

5 And combining the two, as I said, on
6 those ground levels you're going to want to have
7 larger, more open spaces. Whereas, the residential
8 above may have a bearing element every 12 to
9 15 feet, you don't want that on ground level, right?

10 So you've got to be able to pick up
11 that -- those bearing elements above and open up
12 these spaces. When you've got four and five
13 stories, six stories even, it's a lot of load for a
14 wood member to carry over a wide span, a long span
15 to where even with engineered lumber we can't always
16 get it to work. We have to go to steel.

17 So this is where steel beams start to
18 be introduced into the wood framing is in those
19 applications typically. And from a -- from a
20 gravity standpoint that's where they get introduced
21 to create these longer spans when they're supporting
22 multiple stories of wood frame above.

23 But when you introduce a member like
24 that and pick up those multiple stories, whether
25 it's wood or steel, it becomes what's called a

1 primary member that requires encapsulation. And the
2 most efficient -- as I understand it from my
3 experience and what contractors tell me, the most
4 cost effective way to do that is to wrap it in gyp,
5 and that's where the fire hanger comes into play.

6 Q. Okay. With an encapsulated beam could
7 that beam be connected directly to the wall that it
8 intersects?

9 MR. SCHROEDER: Objection, vague.

10 A. The beam is typically connected to a
11 column, whether it's wood or steel beam -- if it's a
12 steel beam, it's going to be connected to a steel
13 column. In the wall, out of the wall, either way.
14 If it's a wood beam, it will likely be supported on
15 either a wood post or a steel post in the -- in the
16 wall, out of the wall, either way.

17 Q. (By Ms. Holoubek) Okay. So you could
18 have a -- even where a fire rating was required, you
19 could have a wood beam on a wood column and just
20 encapsulate it to handle the fire rating; is that
21 correct?

22 A. Yes.

23 Q. Okay. And drywall was the common
24 material that you would use for encapsulation?

25 A. Gypsum is -- again, it's not --

1 Q. Gypsum.

2 A. I should clarify. I'm not specifying
3 the fire-rated requirements. The architect, that's
4 their scope. It's important for me to know what
5 they are.

6 Q. Uh-huh.

7 A. So I know how to frame around them,
8 what to use. And like I said, for example, the FWH
9 hanger. But if they weren't doing gypsum
10 encapsulation and they were doing spray insulation
11 then you could take a different approach.

12 There's also intumescent paint that is
13 allowed in some jurisdictions would allow another
14 approach. May not require an FWH hanger in that
15 situation. So just depended on what was chosen as
16 the fire-rated assembly for those primarily members.
17 That's why it's important for me to know what it is.

18 Q. Yeah. In Type III construction where
19 you use fire-treated lumber, can you attach a floor
20 truss directly to a frame wall using a hanger?

21 MR. SCHROEDER: Objection, vague. You
22 may answer.

23 A. I need you to clarify the question.

24 Q. (By Ms. Holoubek) Sure. And maybe
25 I'll add that it's in a fire barrier context where

1 you are using fire-treated lumber. Can you hang a
2 fire-treated lumber joist or truss -- or truss
3 directly on a frame wall?

4 A. Well, I think it's important to
5 distinguish between FRT and rating. They're totally
6 exclusive things. The FRT requirement has nothing
7 to do with the need for a fire hanger. It's the
8 rating of that wall.

9 Regardless if it's FRT, it's the rating
10 of that wall then what's used to achieve that
11 rating. In this case if it's two layers of gypsum,
12 that's where the fire hanger becomes beneficial.
13 Can I attach a truss to a FRT or fire retardant
14 treated wall directly, yes. With probably a
15 multitude of hangers.

16 But if that wall is required to have
17 two layers of gyp on it to achieve its rating
18 requirement, then I'm going to be very limited as to
19 what hanger I can use to attach it if I'm using a
20 hanger to attach it.

21 Q. Uh-huh. Okay. So switching over to --
22 so paragraph nine, we were talking about before
23 about the middle of that paragraph you were saying
24 (quote as read):

25 To achieve the two-hour rating we would

1 require a second gypsum layer installed
2 between joists and sealed along its
3 edges with fire-rated caulk.

4 Do you see that?

5 A. Yes.

6 Q. When you're talking about between the
7 joists, do you mean between the joists vertically on
8 consecutive floors or are you talking about between
9 the joists horizontally on the same wall?

10 A. Horizontally.

11 Q. Okay. So when you were installing the
12 second layer between the joists, did any of the
13 gypsum also cover the area of the wall under the
14 joist?

15 MR. SCHROEDER: Objection, form.

16 A. So below the joist you would already
17 have two layers of gypsum on -- on a two-hour
18 exterior-rated wall. You would bring the second
19 layer up to the bottom of the joist, where the joist
20 sits in a hanger.

21 That's where the second layer -- as I'm
22 describing, that's where the second layer, the outer
23 layer is terminated or stopped because the truss
24 would then sit in the LBV series hanger, it would
25 span over the base layer, the one face layer of

1 gypsum.

2 And then between the trusses is where
3 we would have them cut out, form-fit basically a
4 layer, a second layer of gypsum to maintain that
5 two-layer requirement between trusses, but then
6 those edges had to be fire caulked. And as I said
7 here, that wasn't always approved or accepted, but
8 it was one of the approaches that we took to try and
9 provide that continuity of rating through the floor.

10 Q. (By Ms. Holoubek) When we talk about
11 the edges being fire caulked, you mean kind of
12 around the form of the hanger; is that right?

13 A. Yes. The form of the hanger where it
14 was exposed, yes.

15 Q. Okay. And you said that that wasn't
16 always accepted depending on the code. Was it
17 sometimes accepted?

18 A. It was sometimes accepted. It was
19 often accepted.

20 Q. Okay. When you have this alternative
21 version, you said (quote as read):

22 Alternatively, we would eliminate the
23 second layer of gypsum board in the
24 floor cavity.

25 What do you mean by the floor cavity?

1 A. So the floor cavity is what I was
2 describing earlier. It's basically from the bottom
3 of the trusses to the underside of the floor
4 sheathing.

5 Q. So you would have one layer of gypsum
6 that's up in the floor cavity and instead of having
7 another layer of gypsum up there you were relying on
8 the ceiling assembly; is that correct?

9 A. So -- so the floor/ceiling assembly is
10 also a rated assembly. From the gypsum layer, the
11 horizontal gypsum layer on the bottom of the
12 ceiling, from that to generally the concrete topping
13 or whatever the finish is that's part of the
14 assembly, that entire assembly will have a rating to
15 it. To achieve that you have to have all those
16 components as part of that assembly constructed.

17 Q. Uh-huh.

18 A. So at the time when we didn't have a
19 hanger to span over two layers one of the
20 alternative arguments we would make is that by
21 having the one layer still on the wall that the
22 hanger was spanning over that gave us our one hour.

23 The floor/ceiling assembly required a
24 minimum of one hour. So that assembly that they
25 chose that was being constructed had to be at least

1 an hour. So our argument was to get the second
2 layer of sheathing on the face of that wall so to
3 speak, the second layer of gyp that they -- you
4 would otherwise have had it if you had a hanger that
5 spanned over two layers.

6 We were looking at the floor/ceiling
7 assembly as basically a big fat layer of gyp as the
8 second layer and making the argument that that one
9 hour plus the one hour at the wall in the floor
10 cavity was the two hours required through the --
11 through the ceiling.

12 Q. Okay. Was that sometimes accepted?

13 A. It was sometimes accepted.

14 Q. We've been talking about fire rating,
15 but gypsum itself is fire resistive, correct?

16 A. Correct.

17 Q. So any wall with gypsum is going to be
18 fire resistive, it just depends on the amount of
19 time?

20 A. Correct.

21 Q. Going back to the discussion of where
22 you would have sort of the pre-rock and then you're
23 installing the second layer of gypsum, you mentioned
24 that you would install the second layer of gypsum
25 and then cut another piece of gypsum between the

1 joists. Why not just cut a notch in the gypsum and
2 extend it all the way up for your second layer?

3 A. Because your termination point is
4 continuous. So you don't have the opportunity to
5 take a layer and just notch it because there's
6 nothing below the notch. The second layer goes up
7 to that point at the bottom of the trusses. The
8 only thing you have left to put in is the piece
9 between the trusses because the second layer you've
10 already put on is going right to that interface,
11 right to that point. So --

12 Q. Would it have been possible instead of
13 stopping the -- I guess the first piece of that, of
14 that second layer, instead of stopping it at the
15 bottom of the truss could you have notched it and
16 gone all the way to the top?

17 A. I understand your question now. The
18 wall is typically built with gypsum placed with its
19 long dimension horizontally. So when you reach that
20 point, it would be a bit unorthodox to rotate the
21 sheathing and then notch it to fit it around the
22 truss.

23 It would be much easier -- gypsum
24 weighs a lot when you're talking about 12-foot
25 pieces or longer that they're maneuvering. So it's

1 much easier and faster to build it if they build the
2 gypsum as they normally would with the long
3 dimension horizontal and just stack it up the wall
4 and fasten it directly to the bottom of the -- or
5 the bottom of the trusses and then only have to
6 manipulate a 20-inch by 18-inch piece of square gyp
7 and place it in-between the trusses.

8 Q. But it could be done?

9 A. It could be done.

10 Q. So why then isn't it a problem to notch
11 the gypsum when you're using the FWH hanger?

12 A. There's no need for any notching. The
13 FWH hanger spans over two layers so you can -- you
14 don't have any need or requirement to notch.

15 Q. Well, don't you have part of the FWH
16 hanger that goes through the sheathing?

17 A. No.

18 Q. There's no penetration in the FWH
19 hanger?

20 A. No. That's the beauty of the hanger is
21 that it spans over both layers. The LBV hanger that
22 we were talking about earlier only spans over one
23 layer.

24 That's where fitting it in-between the
25 trusses was one of those alternative approaches to

1 maintain the two-hour rating to get the second layer
2 through the floor because it could only go over one
3 layer, where the FWH could stand off the wall enough
4 to get two layers behind it without pre-rocking.

5 Q. But when you're putting those two
6 layers in you don't have to penetrate the drywall at
7 all?

8 A. You have to cut a very simple slot,
9 just a line cut with a template that prevents you
10 from going too far that slides right up behind the
11 hanger where the hanger has a vertical metal piece
12 that fits in that slot.

13 It's a very clean, single cut, and so
14 there's not really any notching that has to go on
15 for the FWH hanger. So when you slide that up there
16 you're just cutting a slit in the sheathing at each
17 hanger location so it just slides up behind the
18 hanger.

19 Q. How is cutting a slit different from
20 cutting a notch around, you know, larger component?

21 A. So --

22 MR. SCHROEDER: I'm going to object to
23 scope, but you may answer.

24 A. For the FWH hanger it would be as
25 simple as taking a piece of cardboard -- the

1 approach would be as simple as taking a piece of
2 cardboard, taking a knife and just making one cut
3 vertical.

4 You're done. A notch would require two
5 vertical cuts and a horizontal cut to notch out a
6 section of gypsum. The FWH hanger doesn't require
7 that. It's just a simple vertical cut.

8 Q. (By Ms. Holoubek) And that's what is
9 better about the FWH hanger versus other hangers?

10 MR. SCHROEDER: I'm going to again
11 object to scope.

12 MS. HOLOUBEK: I'll withdraw it.

13 MR. SCHROEDER: Also I'm going to
14 object to vagueness.

15 MS. HOLOUBEK: Okay. I'll withdraw the
16 question.

17 Q. (By Ms. Holoubek) So a little earlier
18 we were talking about your experience with
19 Woodworks, which you mentioned in paragraph 11,
20 right? What exactly is Woodworks?

21 A. It's like a trade organization. They
22 represent the wood industry, Canadian and American
23 Wood Council. It's sort of their advertising arm if
24 you will. They provide a lot of education,
25 continuing education and help for engineers and

1 architects designing around wood. They're very
2 helpful.

3 Q. And around that time Woodworks was
4 trying to encourage more multistory buildings to be
5 constructed with wood; is that correct?

6 A. I would say all buildings, not
7 multistory -- not specifically multistory, but all
8 buildings. They wanted to promote the use of wood
9 in more commercial structures.

10 Q. In that time frame that you were -- so
11 you started working with them in 2008; is that
12 right?

13 A. Earlier than that. I don't remember
14 the exact date. My recollection, it was a little
15 earlier than that. I could be off.

16 Q. Paragraph 11 mentions 2008. What's the
17 significance?

18 A. I would have gone back and looked at my
19 e-mail seminars to say what's the first seminar I
20 did to verify that date. Seems like it was a bit
21 earlier. I'm probably thinking when we started the
22 company. It was shortly after we started it that
23 they reached out to me and asked me if I would start
24 to do seminars.

25 Q. So you started doing those seminars

1 around 2008?

2 A. Yes.

3 Q. Okay. In the 2008 to 2013 time frame
4 would you say there was an increase in Type V
5 construction starts?

6 A. Type V?

7 Q. Uh-huh.

8 A. I don't know if I'm qualified to answer
9 that. The industry is so cyclical. When we started
10 our -- our company in 2003 and kicked off in 2004,
11 the market was booming.

12 When I started doing the seminars -- I
13 mean, I did reach a point where I couldn't do it
14 anymore. Our business was growing. Whether or not
15 that was related to Woodworks or not, I don't know.
16 I mean, again, the -- our business is so up and
17 down.

18 Q. Uh-huh.

19 A. Hard to know.

20 Q. Okay. But you were -- with Woodworks,
21 Woodworks was trying to increase the number of
22 wood-framed buildings --

23 A. Yes.

24 Q. -- is that correct?

25 A. Correct.

1 Q. But you don't know sort of if it
2 actually did that over that time period?

3 A. Well, I do know that we increased --

4 MR. SCHROEDER: I'm going to object to
5 scope. You may answer.

6 A. I know we -- one of our primary
7 objectives, if not the primary objective was to
8 educate architects and engineers because the thought
9 was that wood was only small potatoes. It was
10 single-family and garden-style apartment projects.

11 But with the advances in engineered
12 wood there was so much more opportunity, and that
13 was something that Woodworks was tasked with -- with
14 doing was educating architects, engineers,
15 developers, construction folks, building officials,
16 you name it, everybody in the process, they wanted
17 to educate them on the opportunities with wood, and
18 I'm sure that led to more.

19 Q. (By Ms. Holoubek) You mention
20 engineered wood. What -- why did you use that term?
21 What is engineered wood?

22 MR. SCHROEDER: I'm going to again
23 object to scope. You may answer.

24 A. So engineered wood is just exactly as
25 it sounds. It's not your typical sawn lumber raw

1 material from just cutting a member out of a tree.
2 It's taking pieces and parts and even the -- down to
3 the -- what would -- what would be considered
4 oftentimes waste and developing that along with some
5 adhesive and creating members, structural members
6 from -- from all of those components that would
7 actually have increased strength characteristics.

8 Plywood, for example, is engineered
9 lumber. You basically pull -- or peel the plies off
10 of a tree, laminate them together with glue,
11 pressure and heat of course, and create a piece of
12 sheathing that has incredible strength.

13 Q. (By Ms. Holoubek) So that strength
14 part, so engineered wood is stronger than sawn
15 lumber?

16 A. Generally, yes.

17 Q. Okay. And when you were talking about
18 your -- or the mission of Woodworks, was it
19 primarily for engineered wood that they were trying
20 to encourage?

21 MR. SCHROEDER: I'm going to object to
22 scope.

23 Q. (By Ms. Holoubek) I'll rephrase the
24 question. When was engineered wood starting to be
25 commonly used in construction of wood-framed

1 buildings?

2 MR. SCHROEDER: Again, I object to
3 scope.

4 A. I've been designing with it since day
5 one, my first job. Naturally as the buildings get
6 bigger and bigger, more complex, the need for
7 engineered lumber becomes greater.

8 If we were just building single-family
9 homes we'd be using a whole lot less engineered
10 lumber, of course. So when that actually started,
11 probably again not an expert in trying to determine
12 when that happened.

13 Given my experience and growth so to
14 speak or exposure to the industry, I do remember as
15 a teenager in the construction that I did, we used
16 LVL beams, but some of the engineered lumber that's
17 out there today I doubt was available then.

18 Your question about whether Woodworks
19 was trying to promote the use of engineered wood, I
20 don't know if that was part of their agenda or not.
21 What they asked me to do was to educate people on
22 what was possible from an engineering standpoint in
23 multifamily.

24 Q. (By Ms. Holoubek) Okay. Were there a
25 lot of people that didn't have the knowledge about

1 what was possible with wood in multifamily housing?

2 MR. SCHROEDER: Object to scope.

3 Object, vague. You may answer.

4 A. I would say judging off of the
5 commentary, the feedback, the follow-up after my
6 seminars, yes.

7 Q. (By Ms. Holoubek) Okay. You also
8 mention in paragraph 11 that you specified the FWH
9 hanger for multifamily projects; is that correct?

10 A. Correct.

11 Q. Were those -- did you specify the FWH
12 hanger for Type III or Type V construction?

13 A. Both.

14 Q. For both? Okay. In paragraph 14 you
15 mention that (quote as read):

16 If a contractor had intended to
17 pre-rock, I almost certainly would have
18 explained benefits of using the FWH
19 before moving forward with an
20 alternative approach.

21 Do you see that?

22 A. Yes.

23 Q. Were there situations where a
24 contractor still moved forward with pre-rocking?

25 A. Yes.

1 Q. What were the scenarios where
2 pre-rocking might still be preferable to the FWH?

3 A. Generally if a contractor came back and
4 said he could still do it cheaper, he would go that
5 route. The FWH hanger is not inexpensive. And I
6 would assume that familiarity played a part in it as
7 well.

8 Q. Is pre-rocking still used by some frame
9 constructors?

10 A. Yes.

11 MS. HOLOUBEK: Okay. Why don't we take
12 a break here for maybe about 15 minutes?

13 MR. SCHROEDER: Okay.

14 (WHEREIN, a recess was taken from
15 10:18 a.m. to 10:36 a.m.)

16 Q. (By Ms. Holoubek) Mr. Church, during
17 the break did you talk to anyone about the subject
18 matter of this deposition?

19 A. No.

20 Q. Okay. When you have installed the FWH
21 hanger, do you ever need to use fire caulking around
22 it?

23 A. As part of the assembly installation,
24 I'm not aware that fire caulking is required.

25 Q. You clarified as part of the assembly

1 installation. Do you use fire caulking in other
2 aspects with the FWH hanger?

3 A. Not that I'm aware of.

4 Q. Okay. And why not?

5 MR. SCHROEDER: Objection, scope.

6 Q. (By Ms. Holoubek) Why don't you need
7 to use fire caulking around the FWH hanger?

8 MR. SCHROEDER: I will repeat the
9 objection, scope. You may answer.

10 A. I believe the assembly has been tested
11 without it to meet the two-hour rating requirement.
12 I may be wrong, but I'm not aware -- this would be
13 the first I've heard that fire caulking is required
14 as part of the assembly and installation.

15 MS. HOLOUBEK: Okay. I have no further
16 questions. Pass the witness.

17 COURT REPORTER: Signature?

18 MR. SCHROEDER: Yes.

19 COURT REPORTER: And then other than
20 the rough, the final on Monday on this one too?

21 MS. HOLOUBEK: That works. You can
22 move the final to Tuesday if needed.

23 MR. SCHROEDER: We want the final at
24 some point, but we have no urgency.

25 (Ending time of the deposition: 10:38 a.m.)

CERTIFICATE OF REPORTER

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I, William L. DeVries, a Certified
Court Reporter (MO), Registered Diplomate Reporter,
and a Certified Realtime Reporter, do hereby certify
that the witness whose testimony appears in the
foregoing deposition was duly sworn by me pursuant
to Section 492.010 RSMo; that the testimony of said
witness was taken by me to the best of my ability
and thereafter reduced to typewriting under my
direction; that I am neither counsel for, related
to, nor employed by any of the parties to the action
in which this deposition was taken, and further that
I am not a relative or employee of any attorney or
counsel employed by the parties thereto, nor
financially or otherwise interested in the outcome
of the action.



Certified Court Reporter
within and for the State of Missouri

1 Errata Sheet

2 NAME OF CASE: SIMPSON STRONG-TIE vs COLUMBIA INSURANCE Patent Owner

3 DATE OF DEPOSITION: 08/08/2025

4 NAME OF WITNESS: Matthew S. Church, PE, SE

5 Reason Codes: 1. To clarify the record.

6 2. To conform to the facts.

7 3. To correct transcription errors.

8 Page ____ Line ____ Reason ____

9 From _____ to _____

10 Page ____ Line ____ Reason ____

11 From _____ to _____

12 Page ____ Line ____ Reason ____

13 From _____ to _____

14 Page ____ Line ____ Reason ____

15 From _____ to _____

16 Page ____ Line ____ Reason ____

17 From _____ to _____

18 Page ____ Line ____ Reason ____

19 From _____ to _____

20 Page ____ Line ____ Reason ____

21 From _____ to _____

22 Page ____ Line ____ Reason ____

23 From _____ to _____

24 _____

25 MATTHEW S. CHURCH, PE, SE

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I, MATTHEW S. CHURCH, PE, SE, hereby certify

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under penalty of perjury under the laws of the State of

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Executed this _____ day of

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_____, 2012, at _____,

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MATTHEW S. CHURCH, PE, SE

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