موسسه آموزشی مهندسی ۸۰۸
آموزش های تخصصی عمران و معماری

برنامه چهارمین همایش ملی طراحی عملکردی سازه ها

۲۴ تا ۲۹ بهمن ۹۶

موضوع	سخنران	مدت زمان	توضیحات
ارزیابی و مقاوم سازی ساختمان های بتنی موجود و حل مثال با کمک نرم افزار SeismoBuild و SeismoStruct	Dr. Stelios Antoniou مدیر اجرایی کمپانی SeismoSoft	۲ ساعت	ارائه سمینار به زبان انگلیسی سرفصل: • Methods of Analyses • Checks and Acceptance Criteria • Strengthening Techniques • Evaluation of Different Seismic Retrofitting Solutions - An Example • Strengthening Interventions' Strategy • Real Strengthening Projects • Assessment of a 2-storey RC Building with SeismoBuild
طراحی عملکردی سازه ها فلسفه، اصول و ضرورت ها	جواد قدرتی	۳۰ دقیقه	کارشناس ارشد زلزله- مدرس دوره های طراحی عملکردی
سیستم های کنترلی جداساز و میراگر لرزه ای، کاربردها، بایدها و نبایدها	سید علی موید علایی	۳۰ دقیقه	دکتری زلزله- مدیر عامل شرکت بهساز اندیشان تهران
پنل پرسش و پاسخ	گروه سخنرانان	۱ ساعت	همراه با ارائه توضیحات تکمیلی از سایر نرم افزار های کمپانی Seismosoft

به همراه پذیرایی و بازدید از غرفه های جانبی سالن همایش

(تخفیف ویژه عرضه حضوری محصولات آموزشی ۸۰۸ مختص شرکت کنندگان در همایش)

توجه: تنها برای افرادی که بلیط شرکت در همایش خود را آنلاین از طریق وبسایت ۸۰۸ تهیه کرده اند پذیرش صورت میگردد ، ارائه پرینت بلیط جهت صدور گواهینامه الزامی است

www.civil808.com

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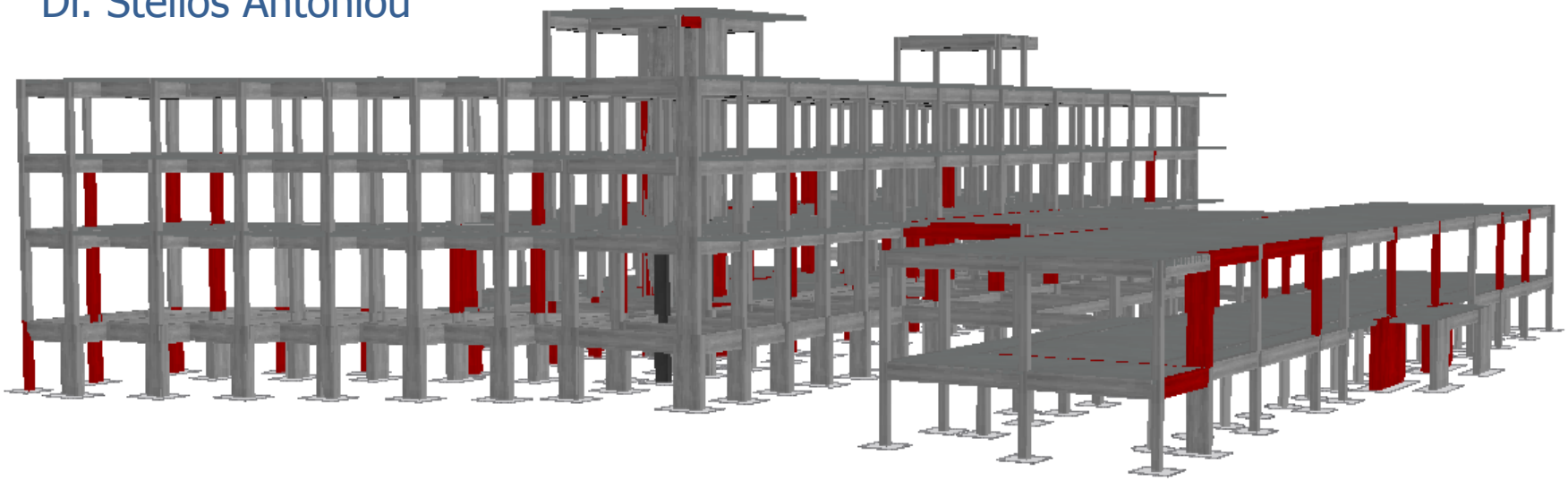
13-19 February,2018, Iran

Seismic Assessment & Retrofitting of Existing RC Structures

Using SeismoBuild and SeismoStruct

Dr. Stelios Antoniou



Seismosoft ltd.
www.seismosoft.com

Presentation Summary

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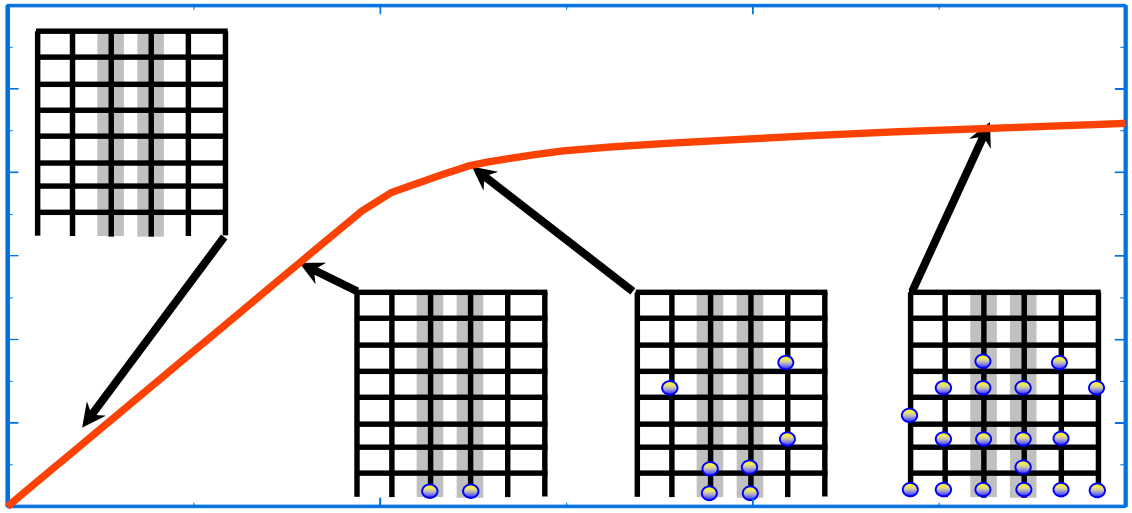
1. Methods of Analyses
2. Checks and Acceptance Criteria
3. Strengthening Techniques
4. Evaluation of Different Seismic Retrofitting Solutions - An Example
5. Strengthening Interventions' Strategy
6. Real Strengthening Projects
7. Assessment of a 2-storey RC Building with SeismoBuild

Presentation Summary

1. Methods of Analyses

- Brief description of Performance-based Engineering
- Methods of Analyses, linear and nonlinear
- Advantages and Disadvantages
- Limitations imposed by the Codes
- Guidelines on how to select method of analysis (preferred method)



Presentation Summary

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1. Methods of Analyses
2. **Checks and Acceptance Criteria**
3. Strengthening Techniques
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Presentation Summary

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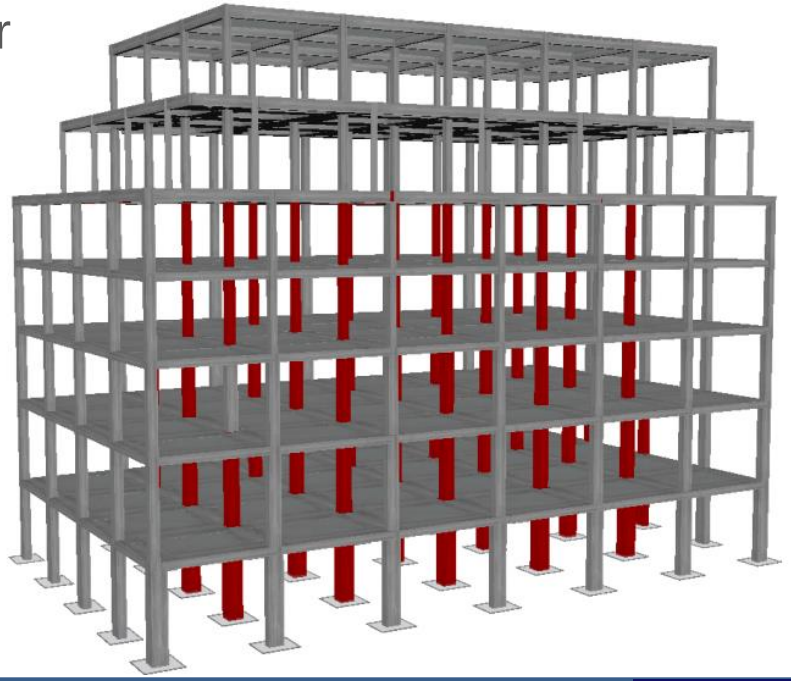
2. Checks and Acceptance Criteria

- Classification of Structural Members
  - Primary / Secondary
- Classification of Actions
  - Force-controlled / Deformation-controlled
- Expected vs. Lower-Bound Strengths
- Knowledge Level & Knowledge Factor
- Capacity Checks
  - Linear methods & non-linear methods
  - Main checks of the assessment



Presentation Summary

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1. Methods of Analyses
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3. **Strengthening Techniques**
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Presentation Summary

3. Strengthening Techniques

- Presentation of the Basic Strengthening Techniques
  - RC Jackets
  - New RC walls
  - Steel Bracing
  - FRP Wrapping
  - FRP Laminates
  - Steel Plates
  - Seismic Isolation
  - Resins / Mortars
- Effects on the Structural Response
- Advantages / Disadvantages
- When they are used

Presentation Summary

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1. Methods of Analyses
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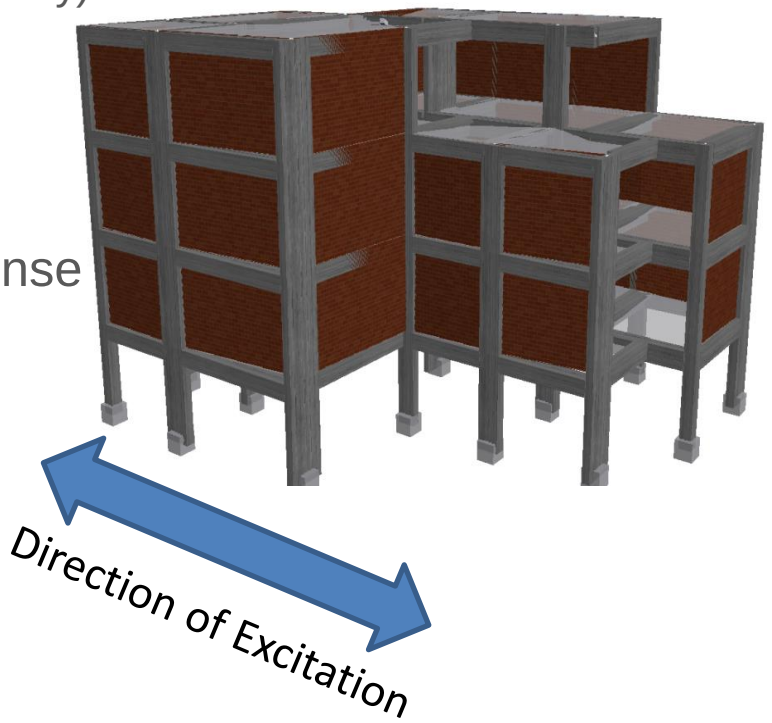
Presentation Summary

4. Evaluation of Different Seismic Retrofitting Solutions - An Example

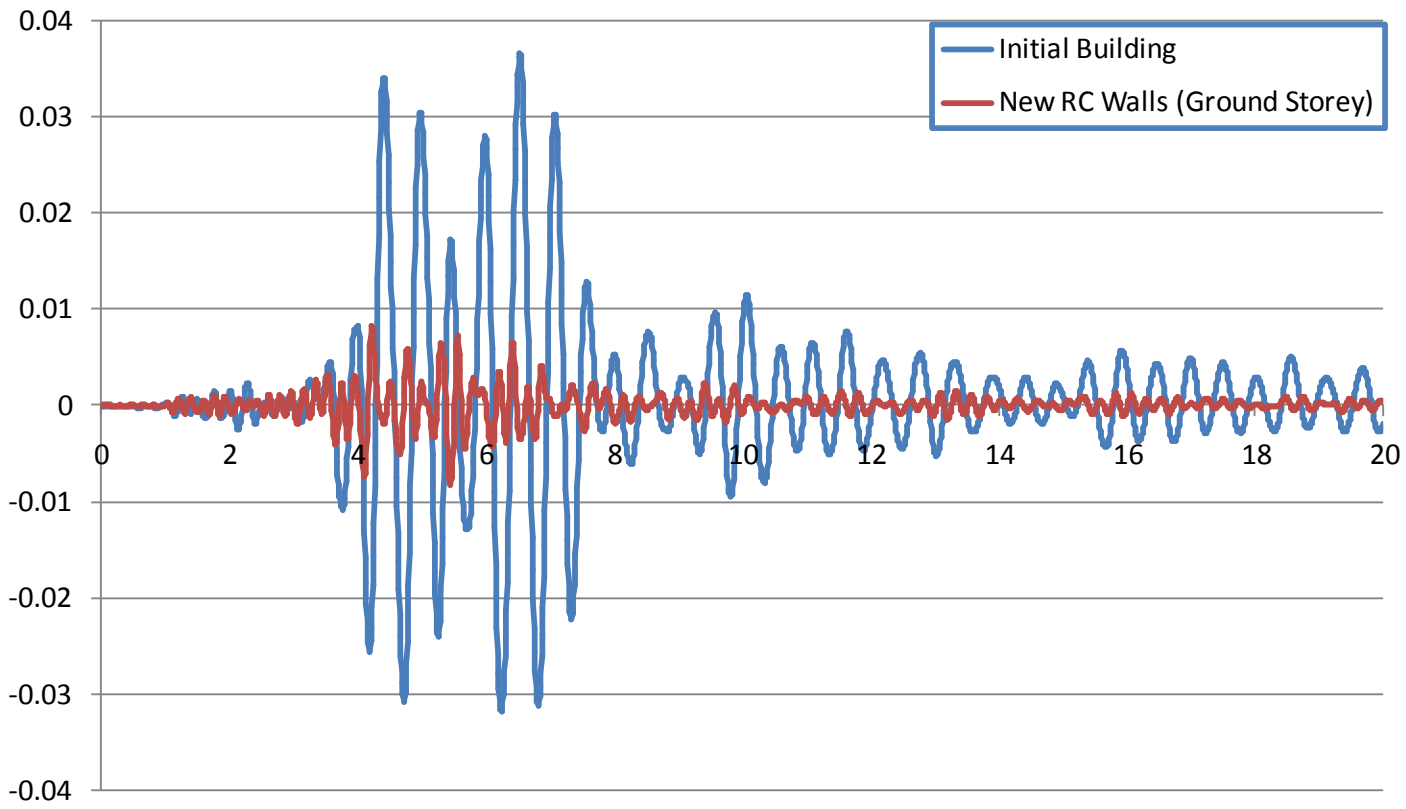
- Existing RC Building
- Different Strengthening Methods
  - Strengthening with Jacketing
  - Strengthening with RC Walls (ground floor only)
  - Strengthening with RC Walls (full height)
  - Strengthening with Braces
  - Strengthening with FRP Wrapping
- Interventions' Effect on Structural Response
- Advantages / Disadvantages
- Comparison between Methods



Presentation Summary

4. Evaluation of Different Seismic Retrofitting Solutions – An Example

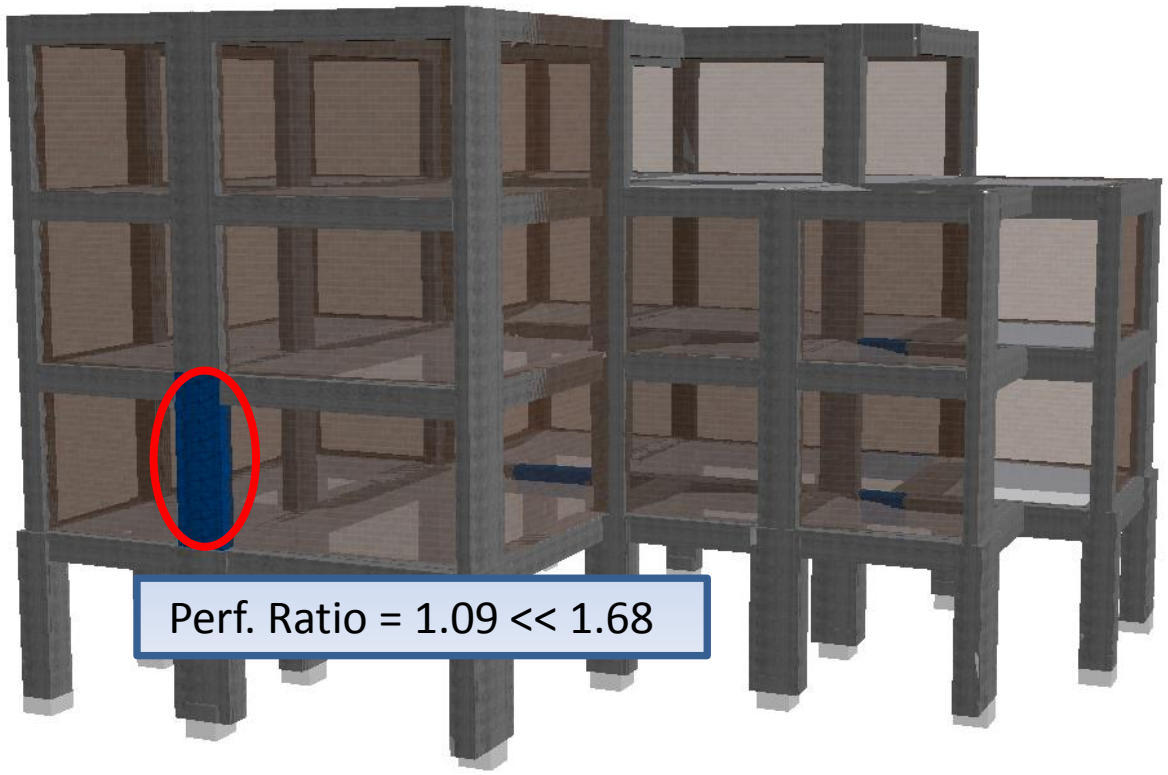
- Comparative Plots



Presentation Summary

4. Evaluation of Different Seismic Retrofitting Solutions – An Example

- Compare Response with/without Strengthening



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Presentation Summary

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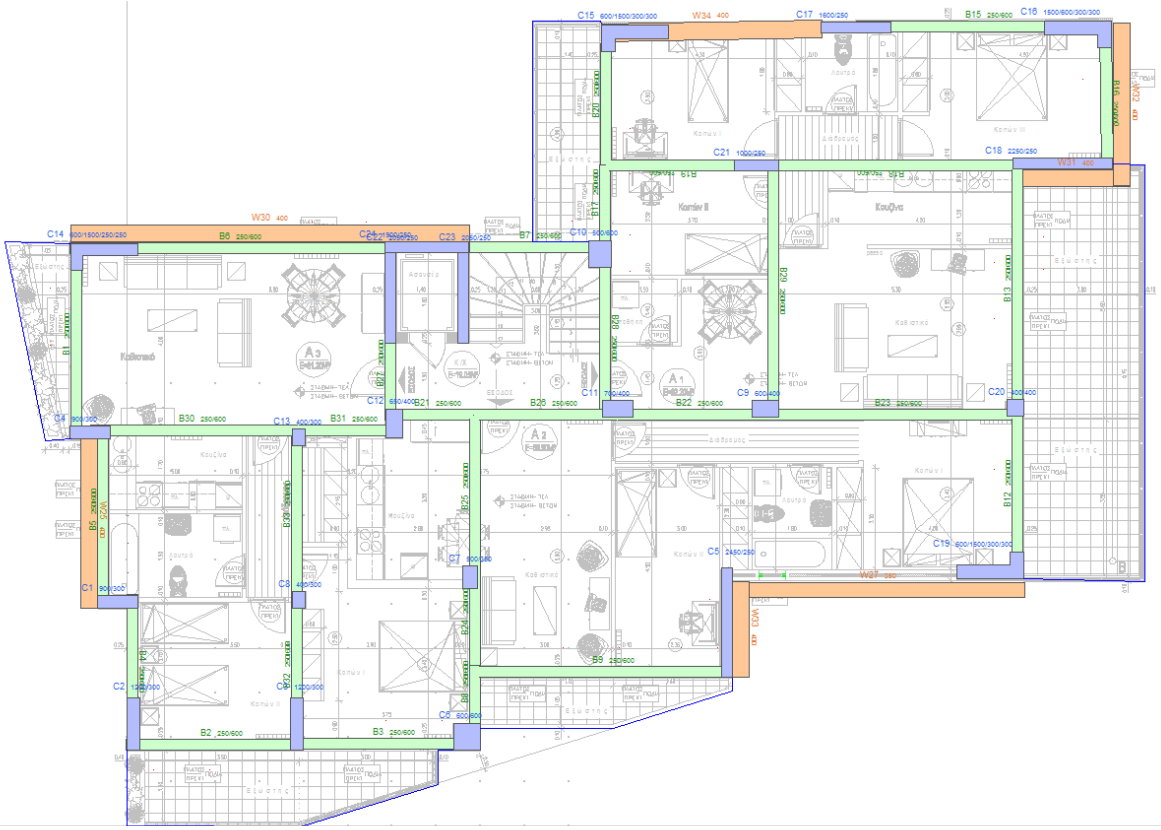
5. Strengthening Interventions Strategy

- Criteria for selecting Strengthening Methods
- Some Basic (empirical) Rules



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Presentation Summary

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6. Real Strengthening Projects

- Presentation of Several Strengthening Projects with Different Strengthening Techniques

Presentation Summary

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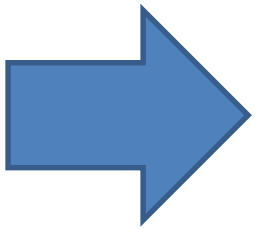
6. Real Strengthening Projects

- Strengthening of Damaged Building from Recent Earthquake



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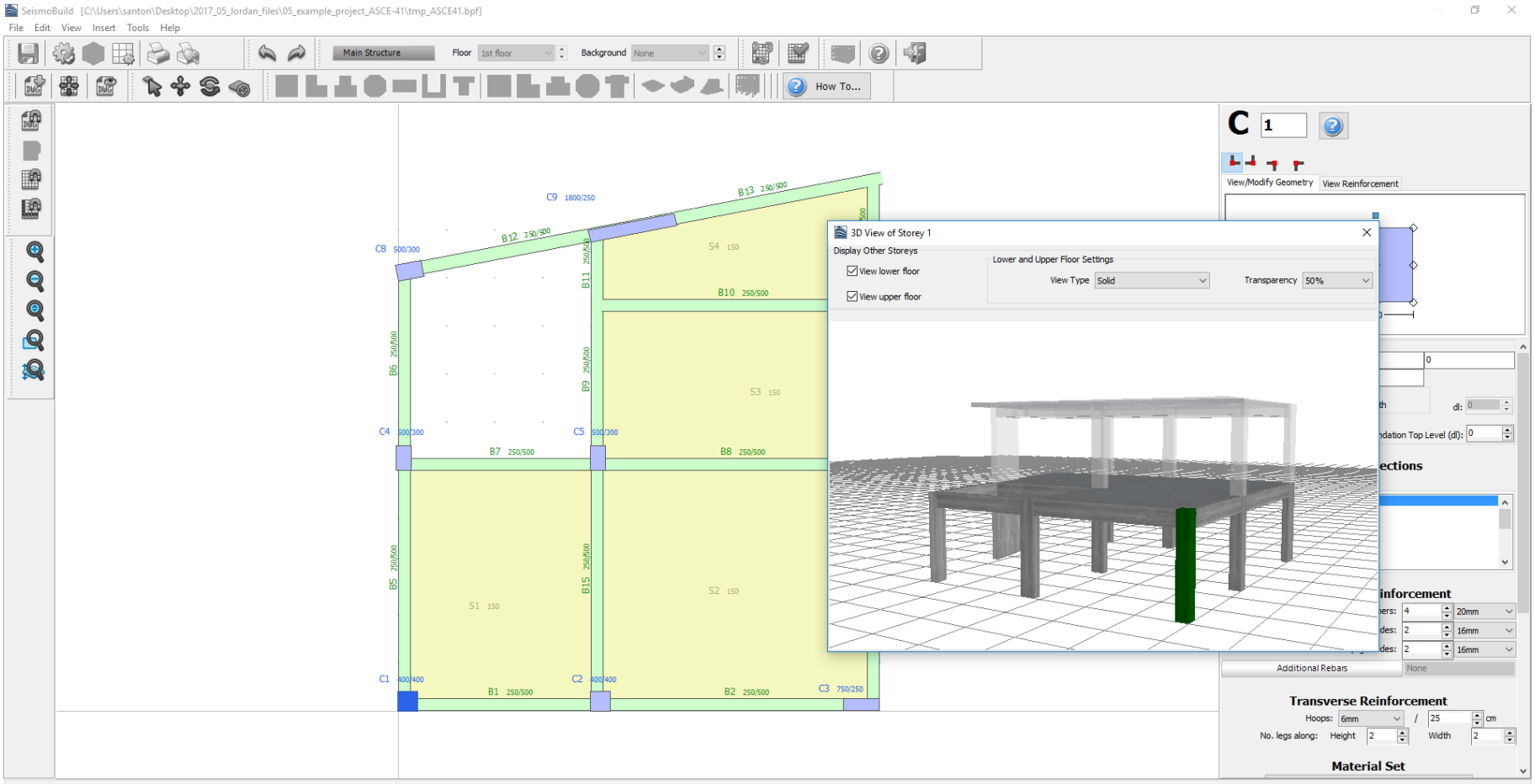
7. Assessment of a 2-storey RC Building with SeismoBuild

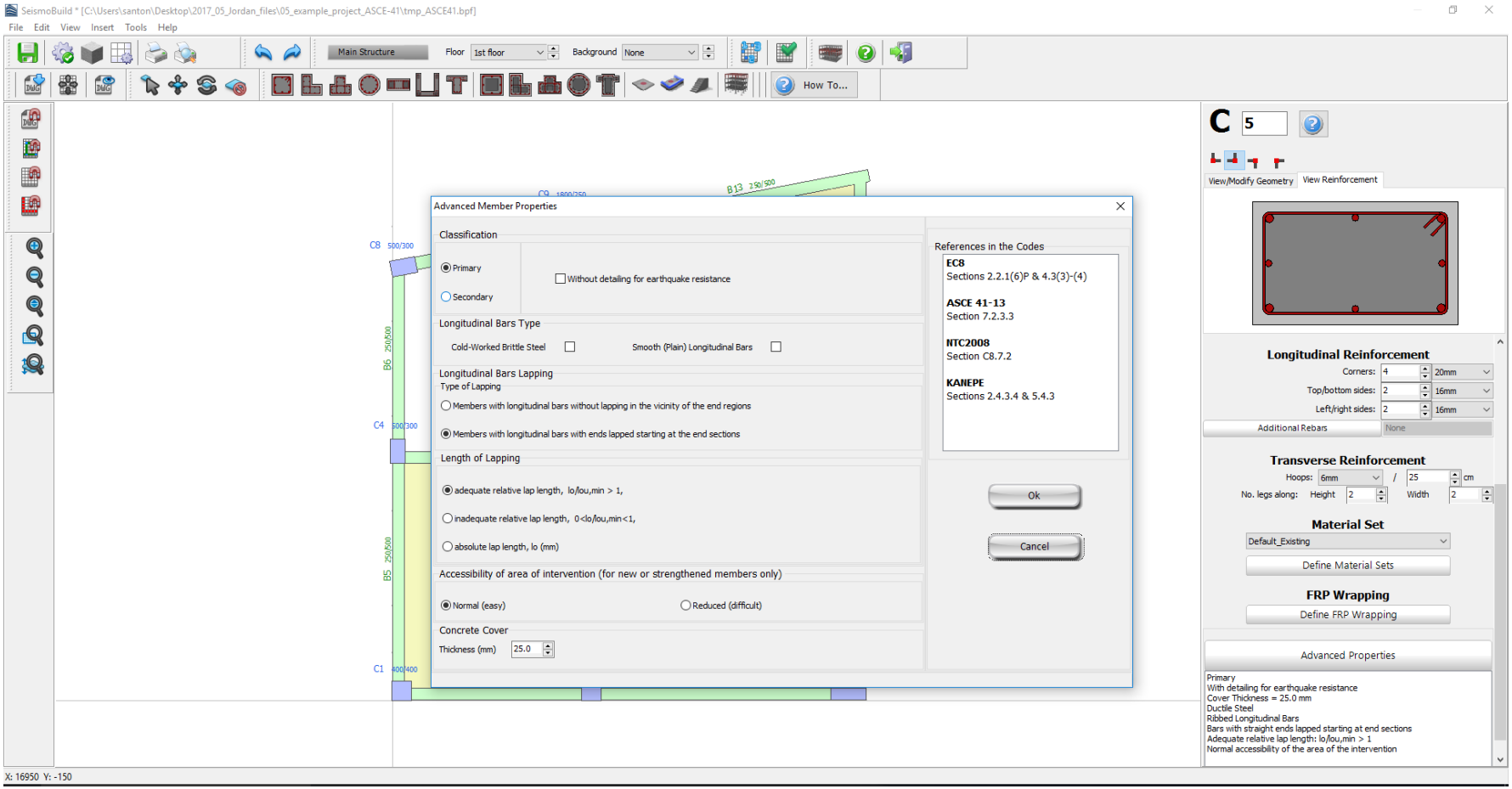
- Construct the Structural Model



Presentation Summary

7. Assessment of a 2-storey RC Building with SeismoBuild

- Input the Assessment Parameters



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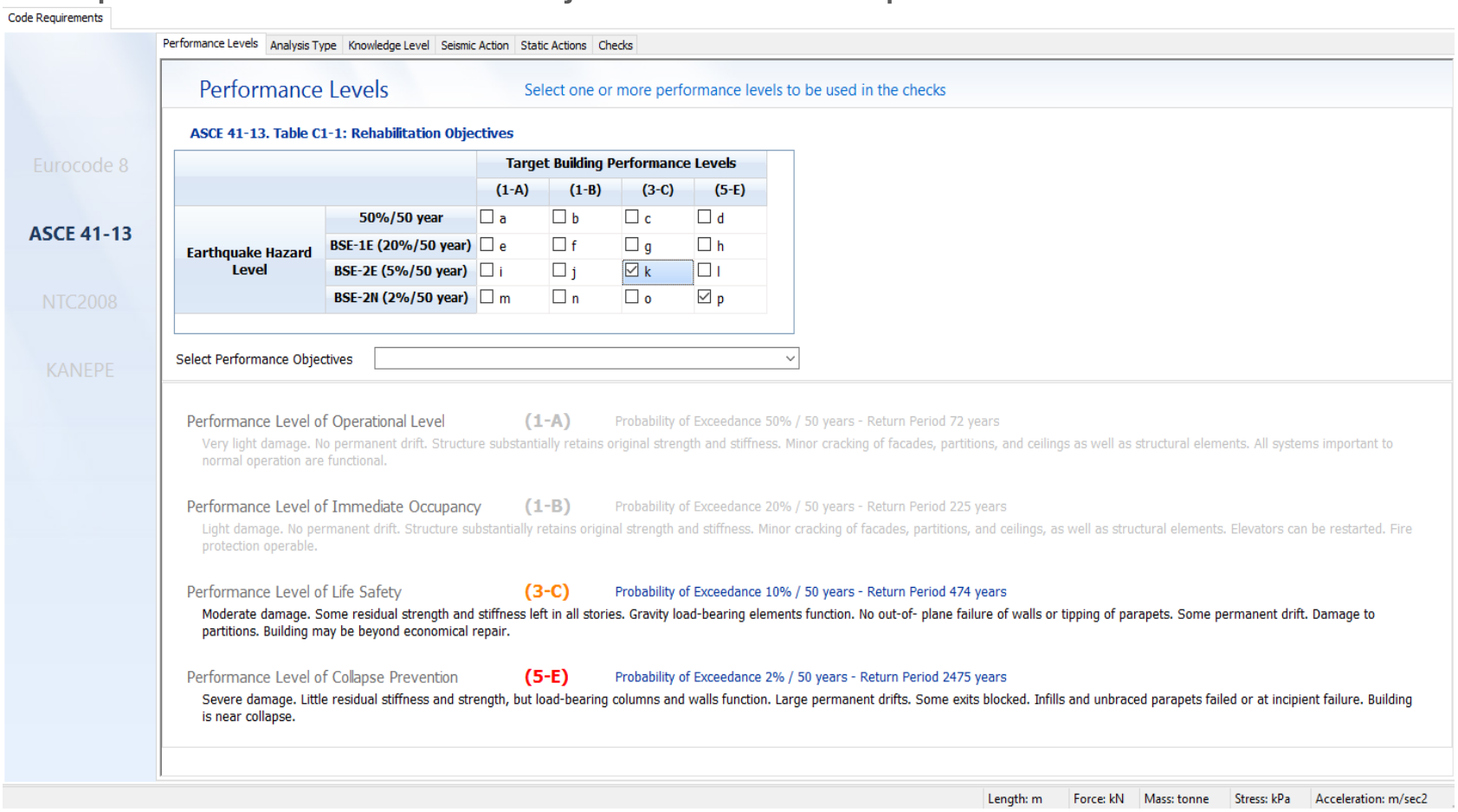
7. Assessment of a 2-storey RC Building with SeismoBuild

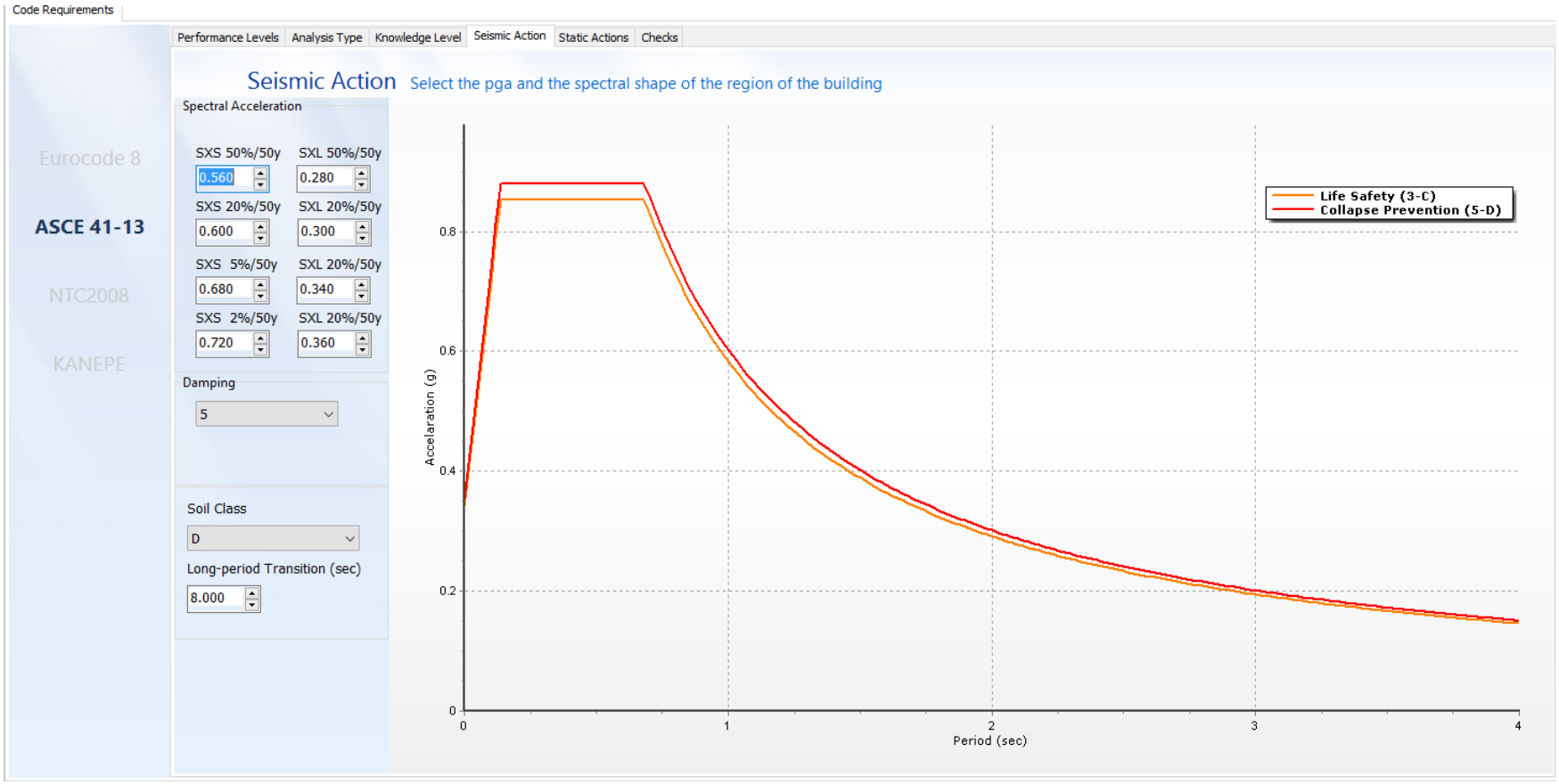
- Input the Performance Objectives & Earthquake Hazard Levels



Presentation Summary

7. Assessment of a 2-storey RC Building with SeismoBuild

- Input the Seismic Action



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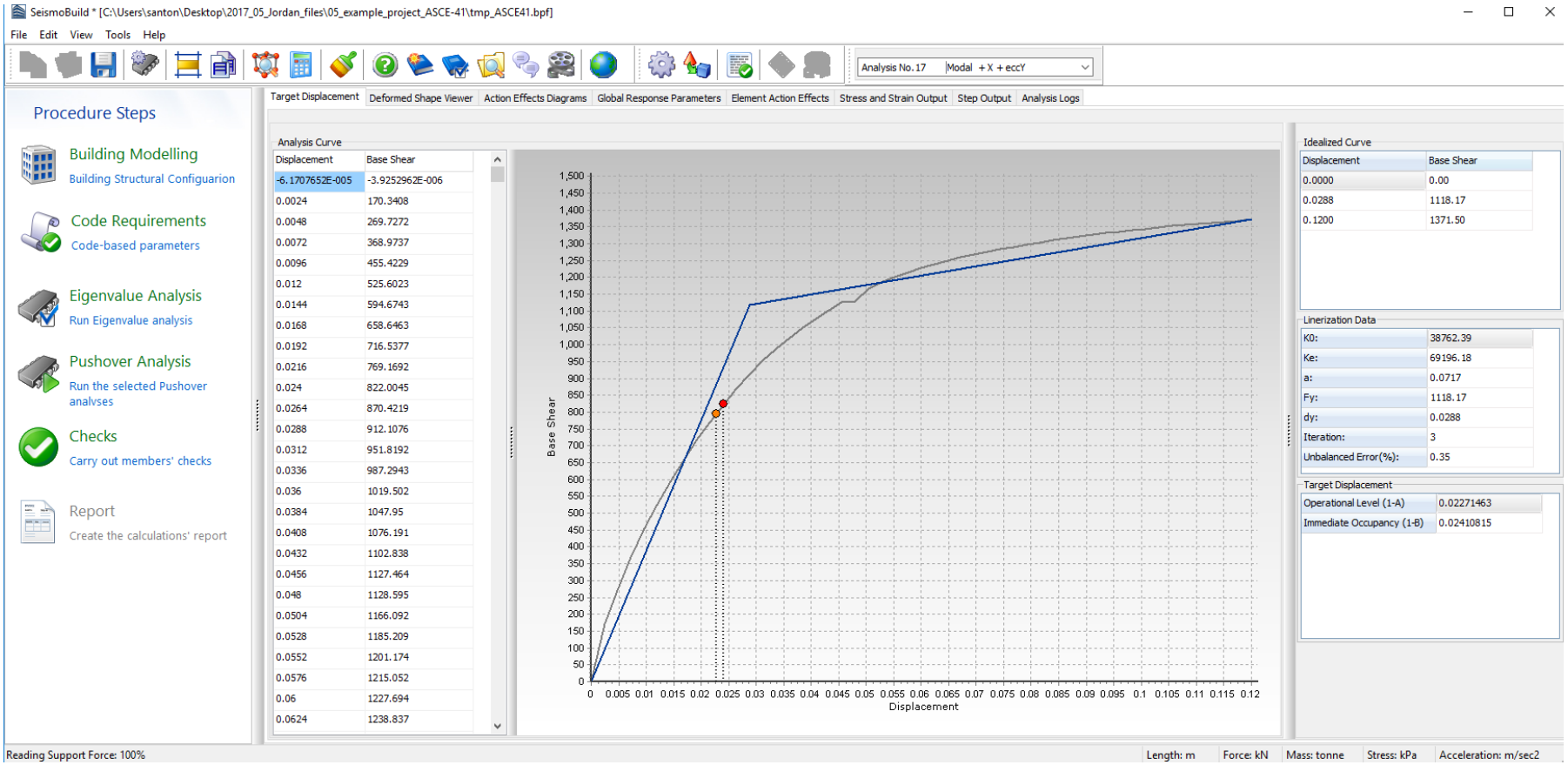
7. Assessment of a 2-storey RC Building with SeismoBuild

- Carry out the Required Analyses (Eigenvalue & Pushover)



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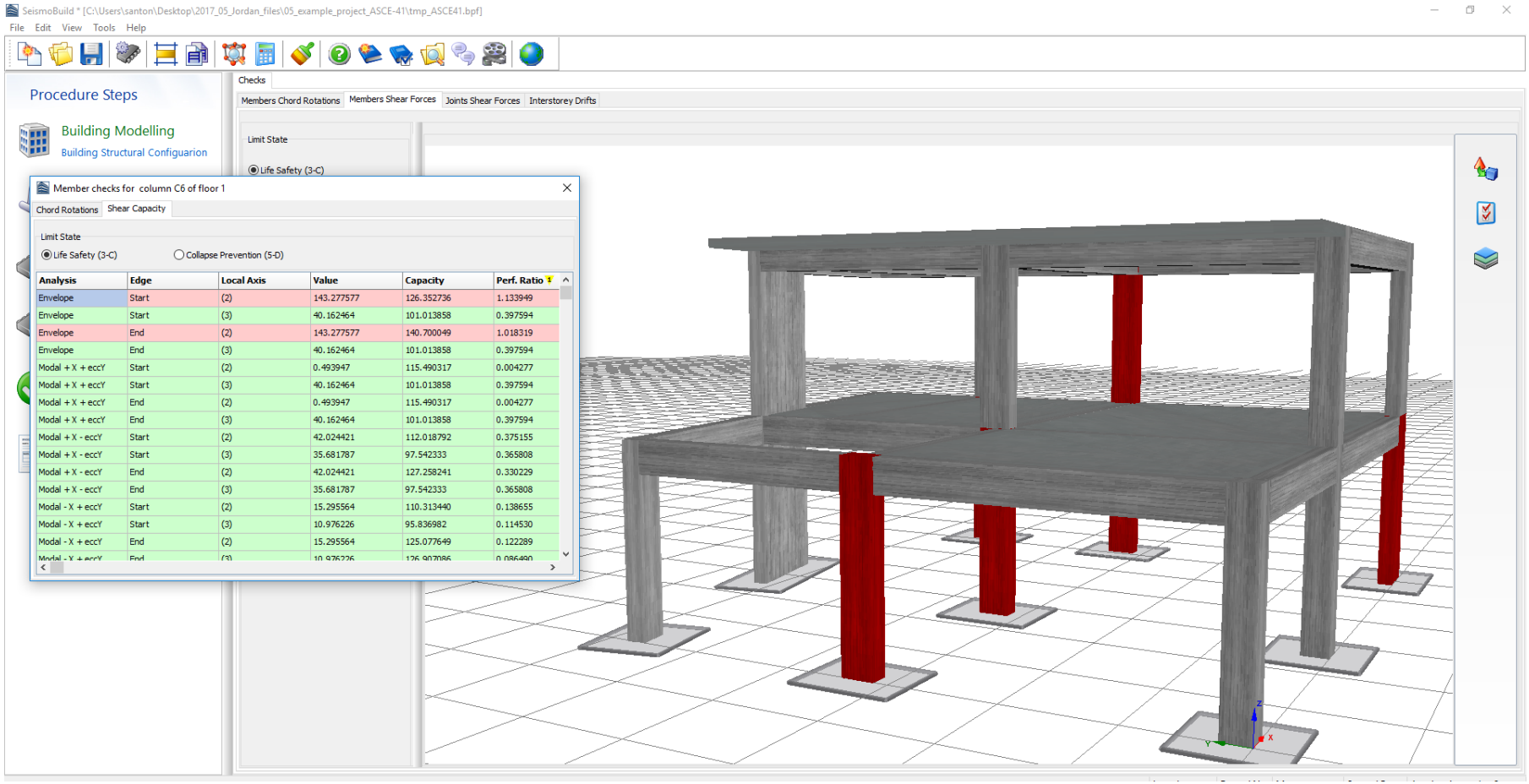
7. Assessment of a 2-storey RC Building with SeismoBuild

- Carry out the Capacity Checks



Analysis	Edge	Local Axis	Value	Capacity	Perf. Ratio
Envelope	Start	(2)	143.277577	126.352736	1.133949
Envelope	Start	(3)	40.162464	101.013858	0.397594
Envelope	End	(2)	143.277577	140.700049	1.018319
Envelope	End	(3)	40.162464	101.013858	0.397594
Modal + X + eccY	Start	(2)	0.493947	115.490317	0.004277
Modal + X + eccY	Start	(3)	40.162464	101.013858	0.397594
Modal + X + eccY	End	(2)	0.493947	115.490317	0.004277
Modal + X + eccY	End	(3)	40.162464	101.013858	0.397594
Modal + X - eccY	Start	(2)	42.024421	112.018792	0.375155
Modal + X - eccY	Start	(3)	35.681787	97.542333	0.365808
Modal + X - eccY	End	(2)	42.024421	127.258241	0.330229
Modal + X - eccY	End	(3)	35.681787	97.542333	0.365808
Modal - X + eccY	Start	(2)	15.295564	110.313440	0.138655
Modal - X + eccY	Start	(3)	10.976226	95.836982	0.114530
Modal - X + eccY	End	(2)	15.295564	125.077649	0.122289
Modal - X + eccY	End	(3)	10.976226	126.907086	0.086490

Presentation Summary

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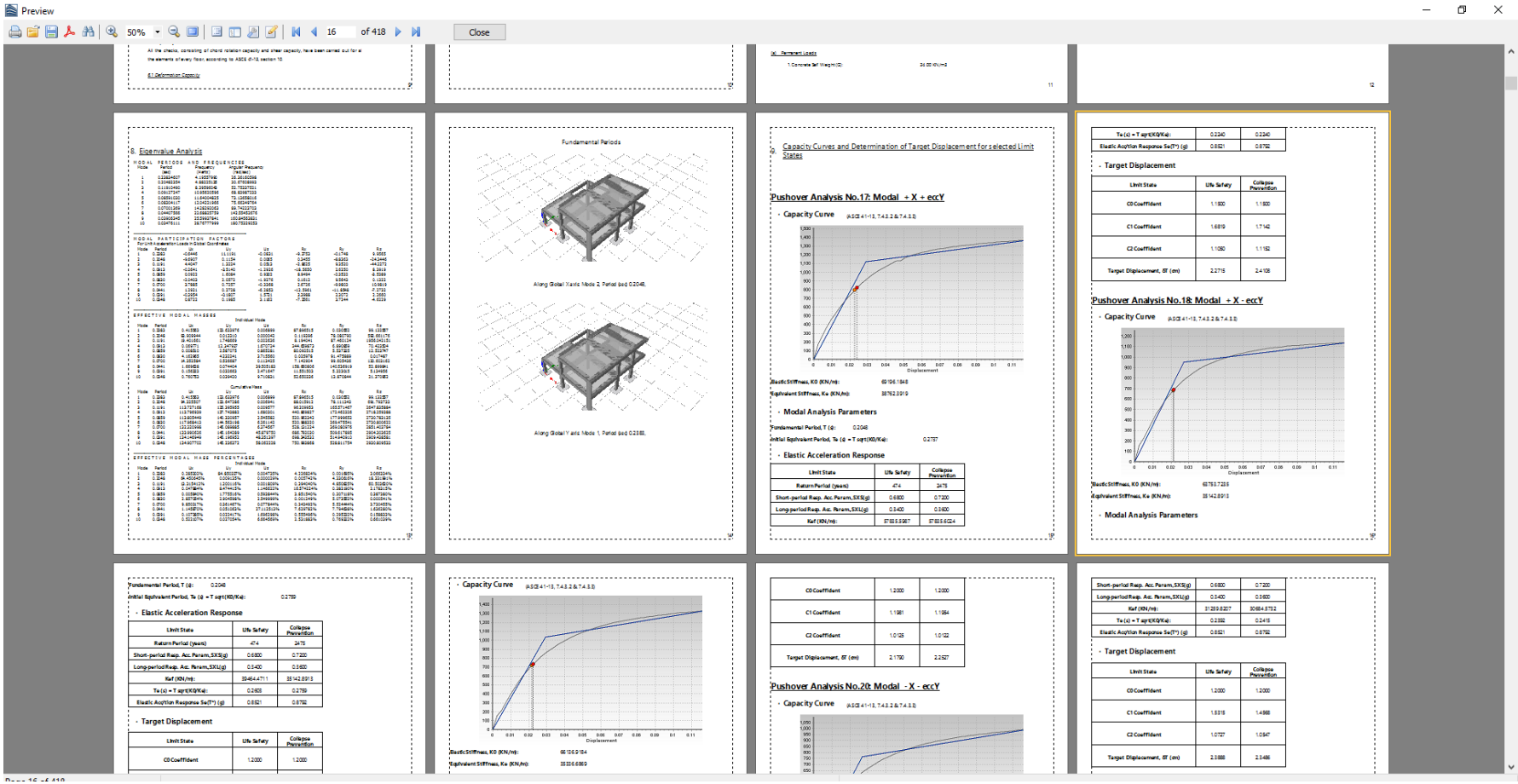
7. Assessment of a 2-storey RC Building with SeismoBuild

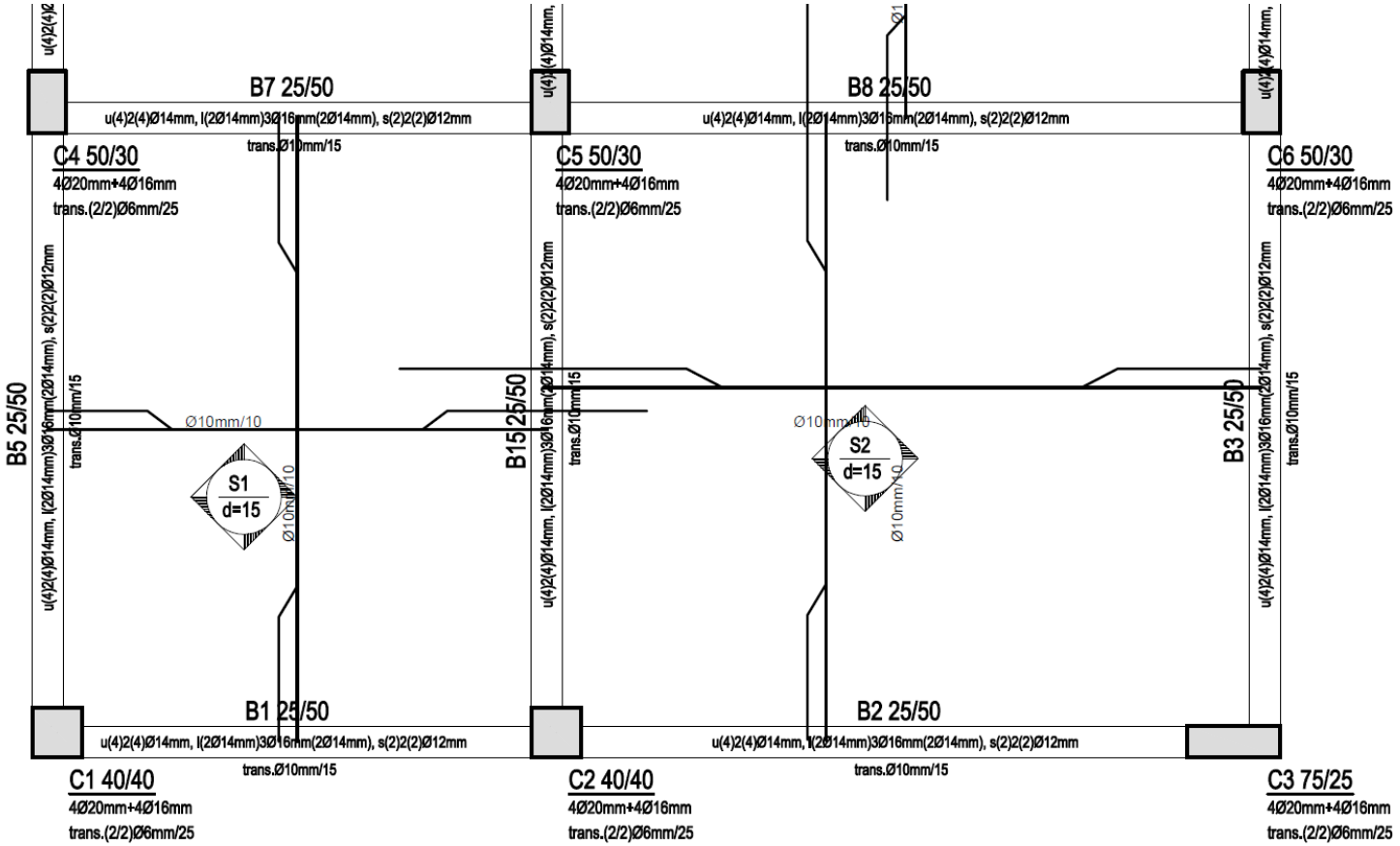
- Export the Deliverables (Report with checks)



Presentation Summary

7. Assessment of a 2-storey RC Building with SeismoBuild

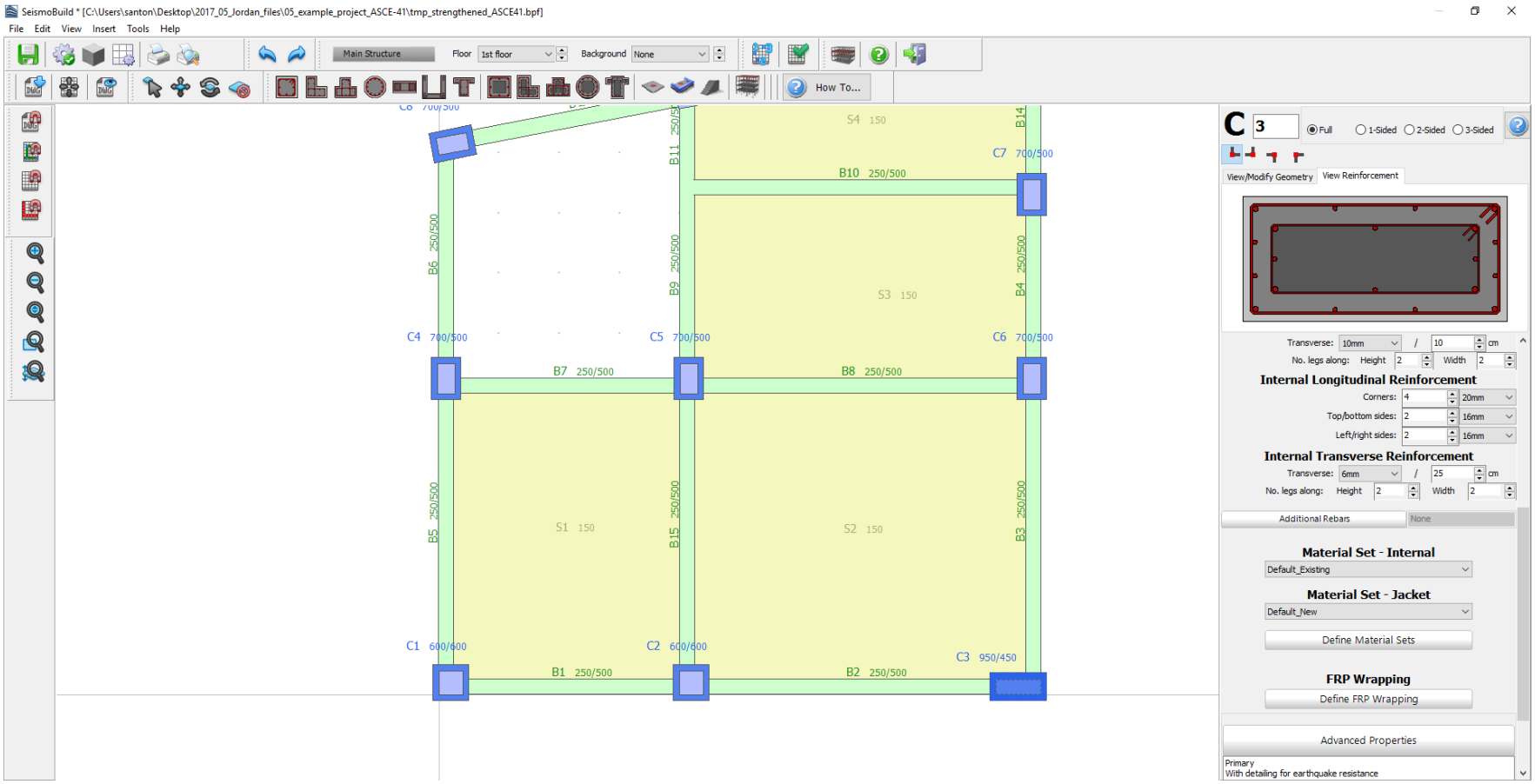
- Export the Deliverables (CAD drawings)



Presentation Summary

7. Assessment of a 2-storey RC Building with SeismoBuild

- Strengthen the building and carry out the checks again



Presentation Summary

7. Assessment of a 2-storey RC Building with SeismoBuild

- Strengthen the building, run the analysis and export the deliverables