

ALMA MATER STUDIORUM - UNIVERSITA' DEGLI STUDI DI BOLOGNA
SCUOLA DI INGEGNERIA E ARCHITETTURA

CORSO DI LAUREA MAGISTRALE IN INGEGNERIA CIVILE

DICAM

Dipartimento di Ingegneria Civile, Chimica, Ambientale e dei Materiali

TESI DI LAUREA
in
PROGETTI DI STRUTTURE M

**AZIONE DEL VENTO SU FACCIATE CONTINUE DI EDIFICI A TORRE:
APPROCCIO NORMATIVO, ANALISI IN GALLERIA DEL VENTO E
MODELLAZIONE CFD**

ALLEGATO A - RISULTATI ANALISI CFD

Candidato:

Nicolas Foschi

Relatore:

Chiar.mo Prof. Ing. Luca Pozza

Correlatore:

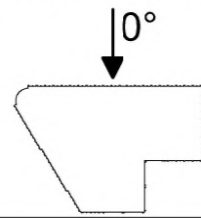
Dott. Ing. Stefano Pagliarani

ANNO ACCADEMICO 2020 - 2021

SESSIONE III

CASO 1: VENTO 0°

PRESSIONI ESTERNE POSITIVE [Pa]



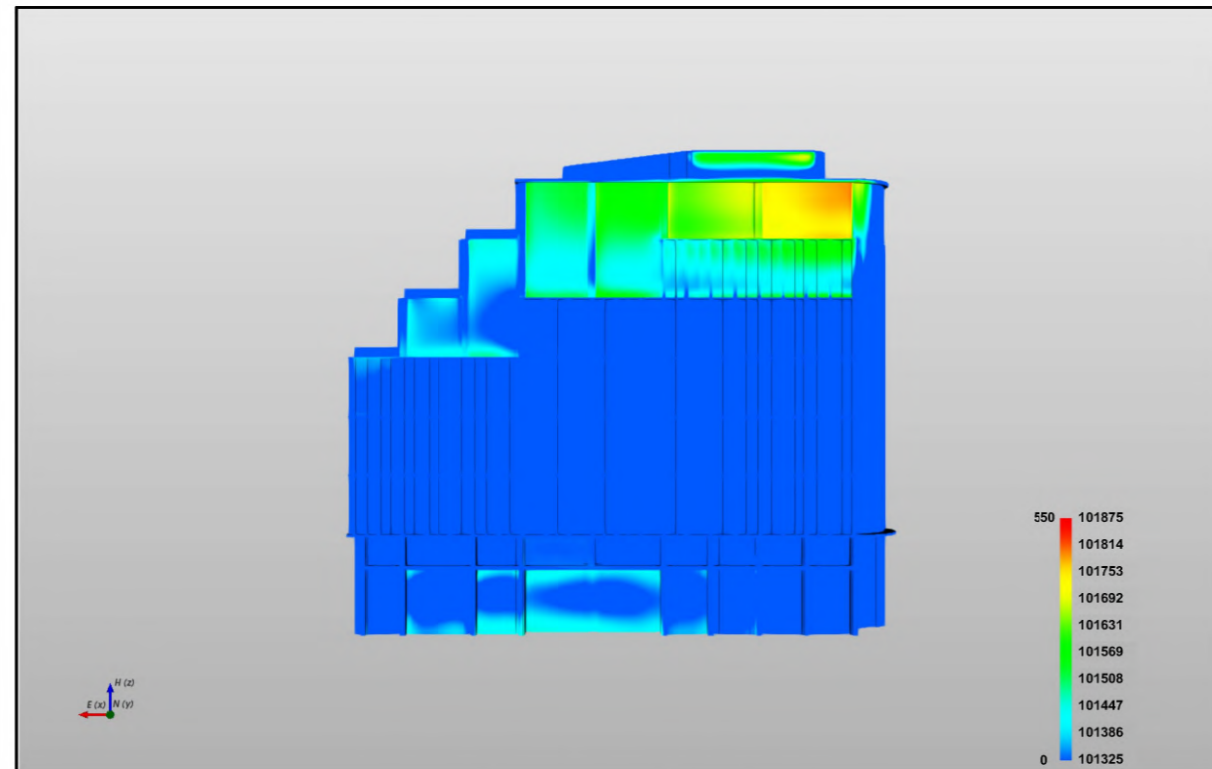
TESI in PROGETTI DI STRUTTURE M

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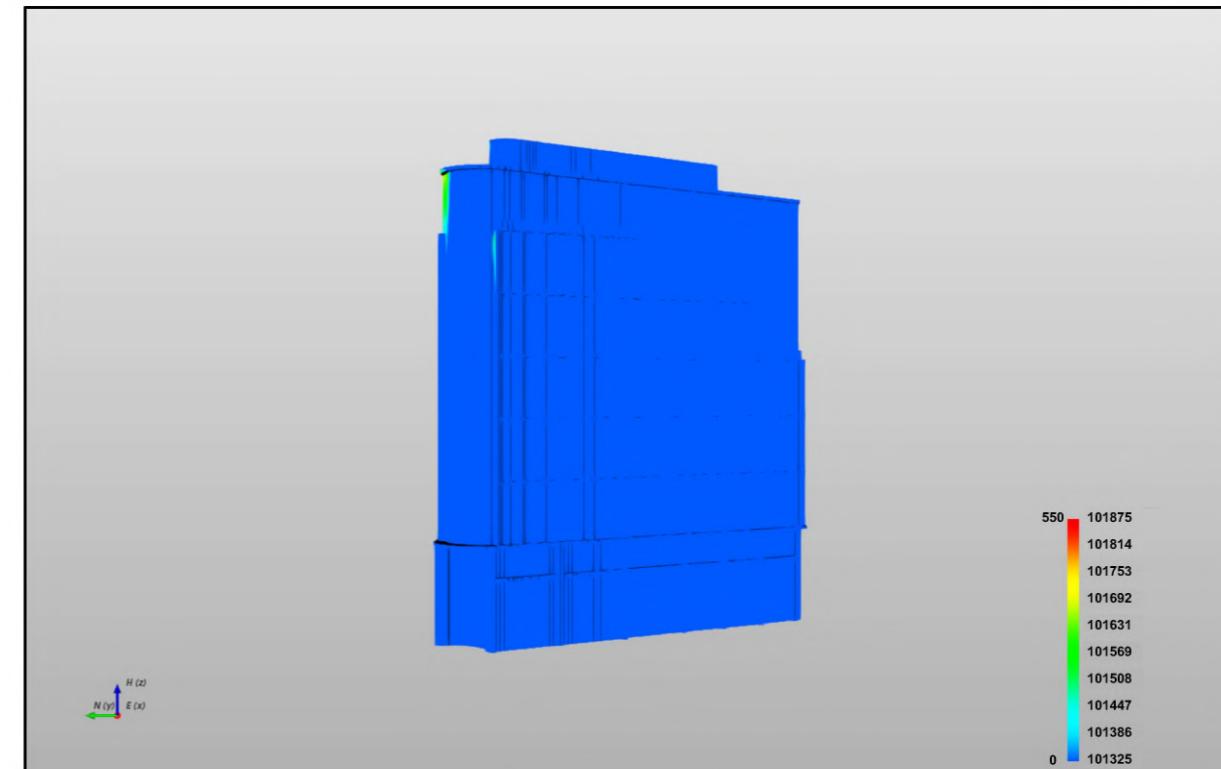
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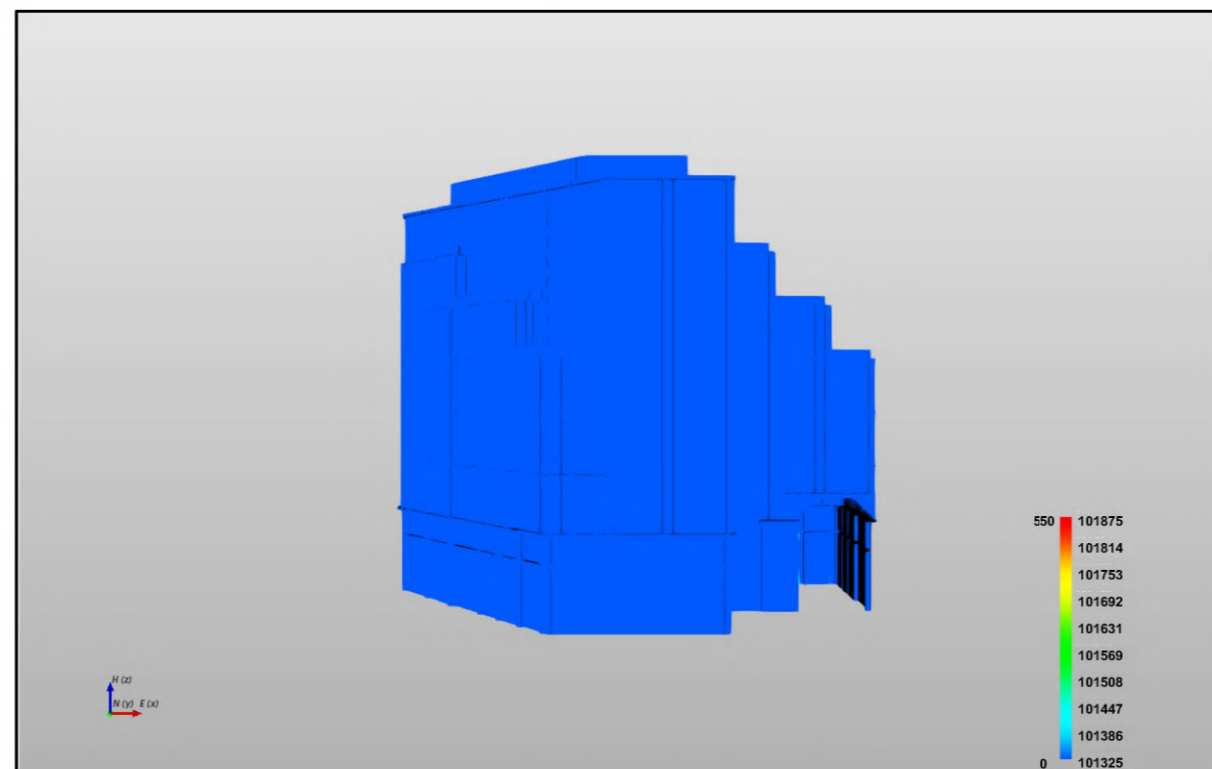
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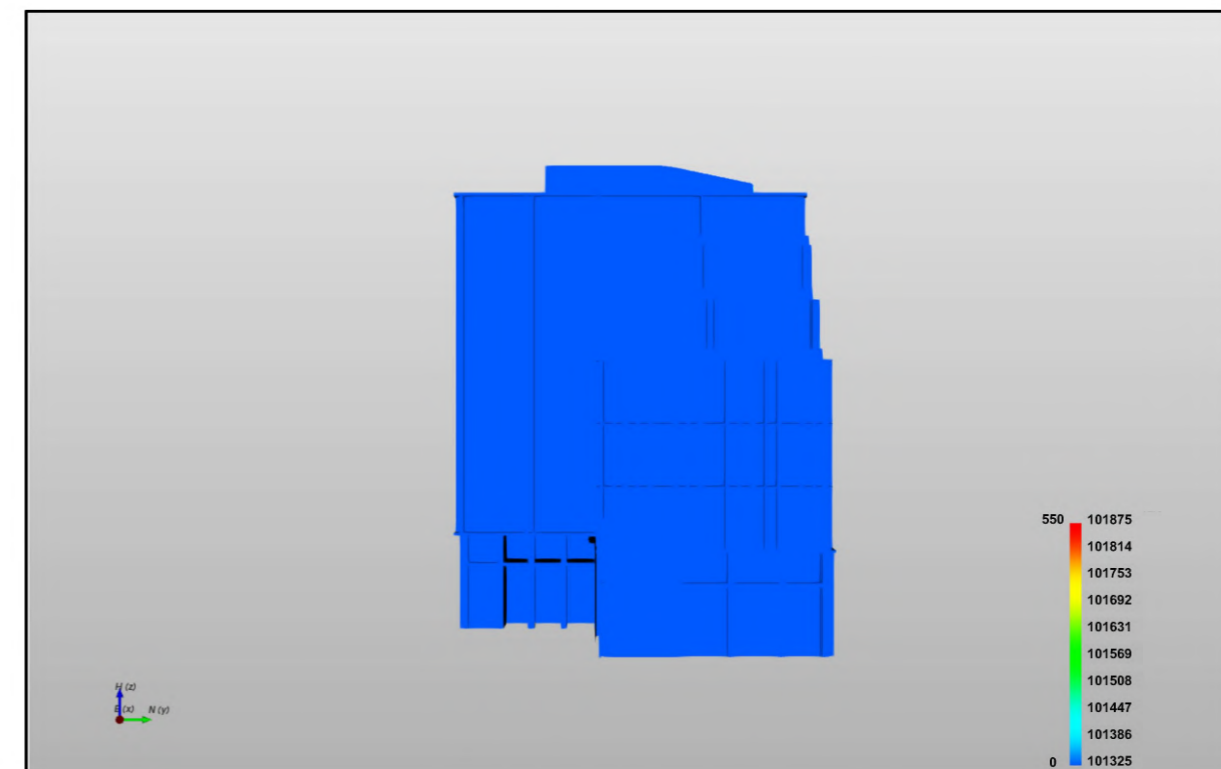
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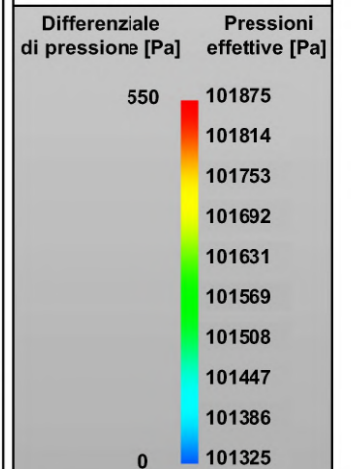


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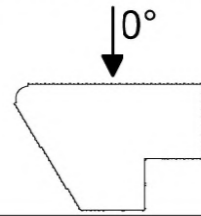
PROSPETTO EST

LEGENDA



CASO 1: VENTO 0°

PRESSIONI ESTERNE NEGATIVE [Pa]



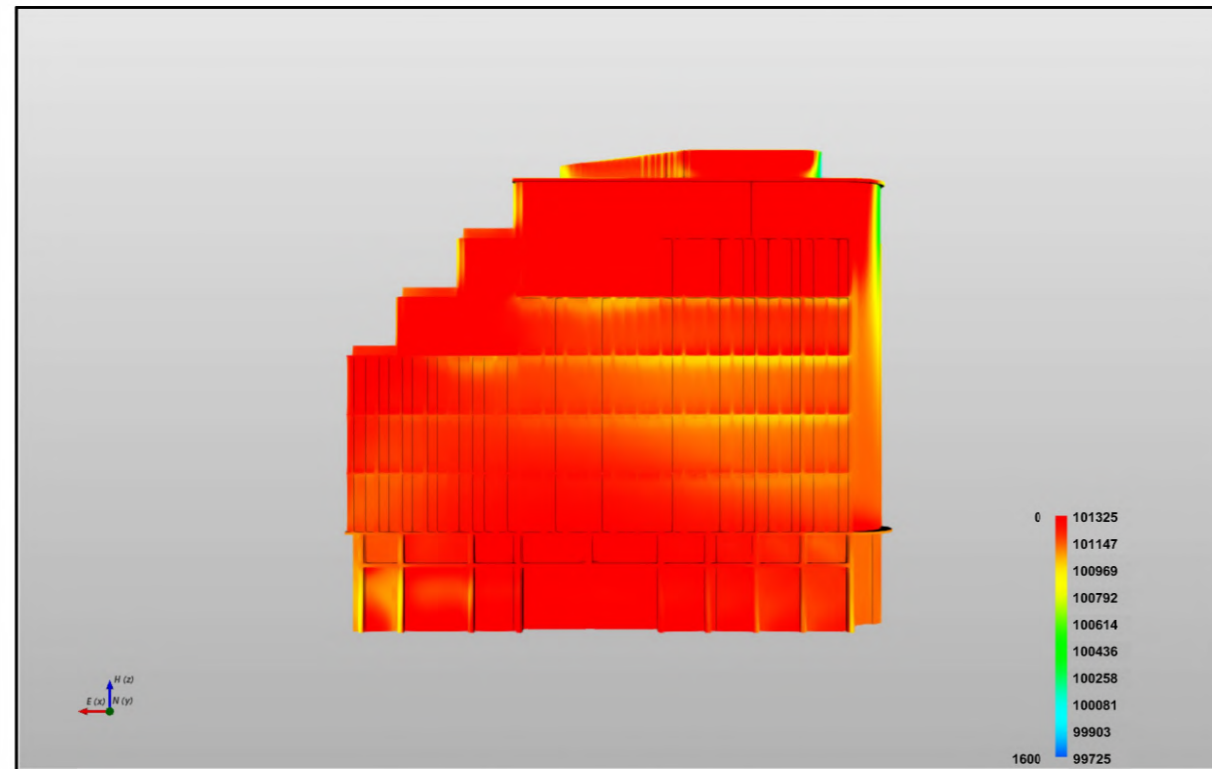
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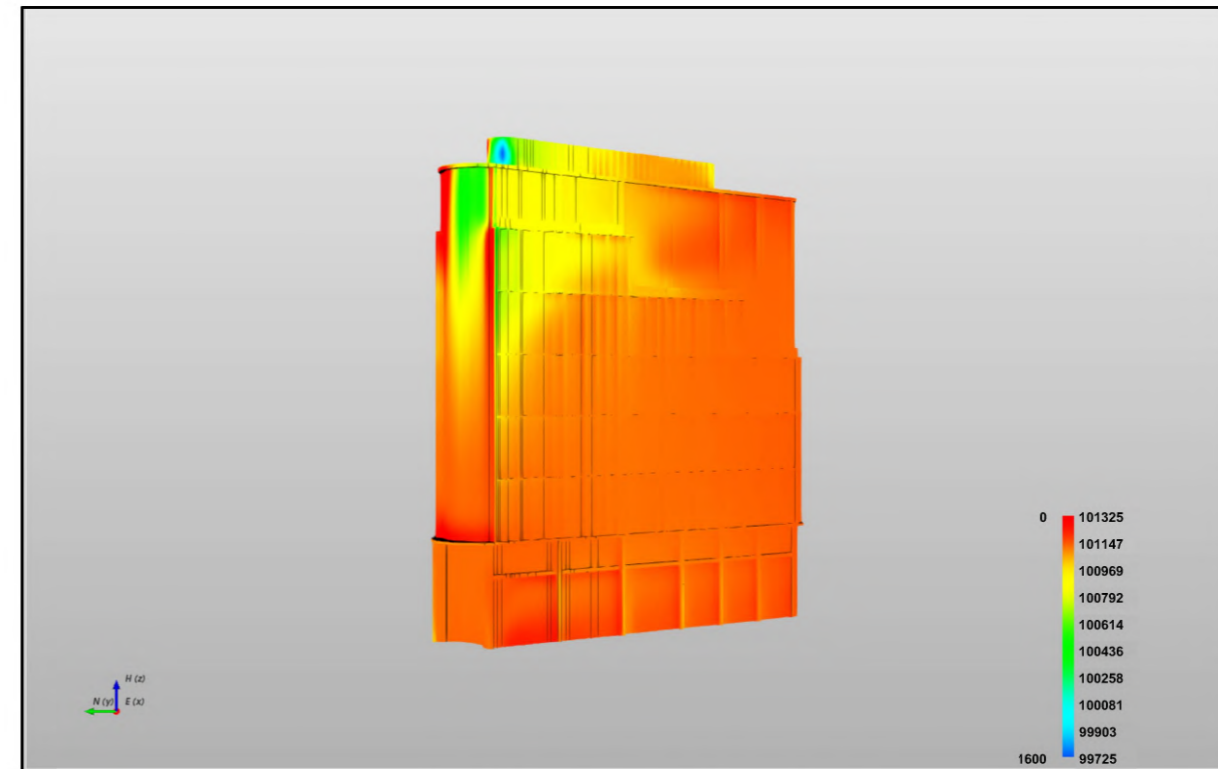
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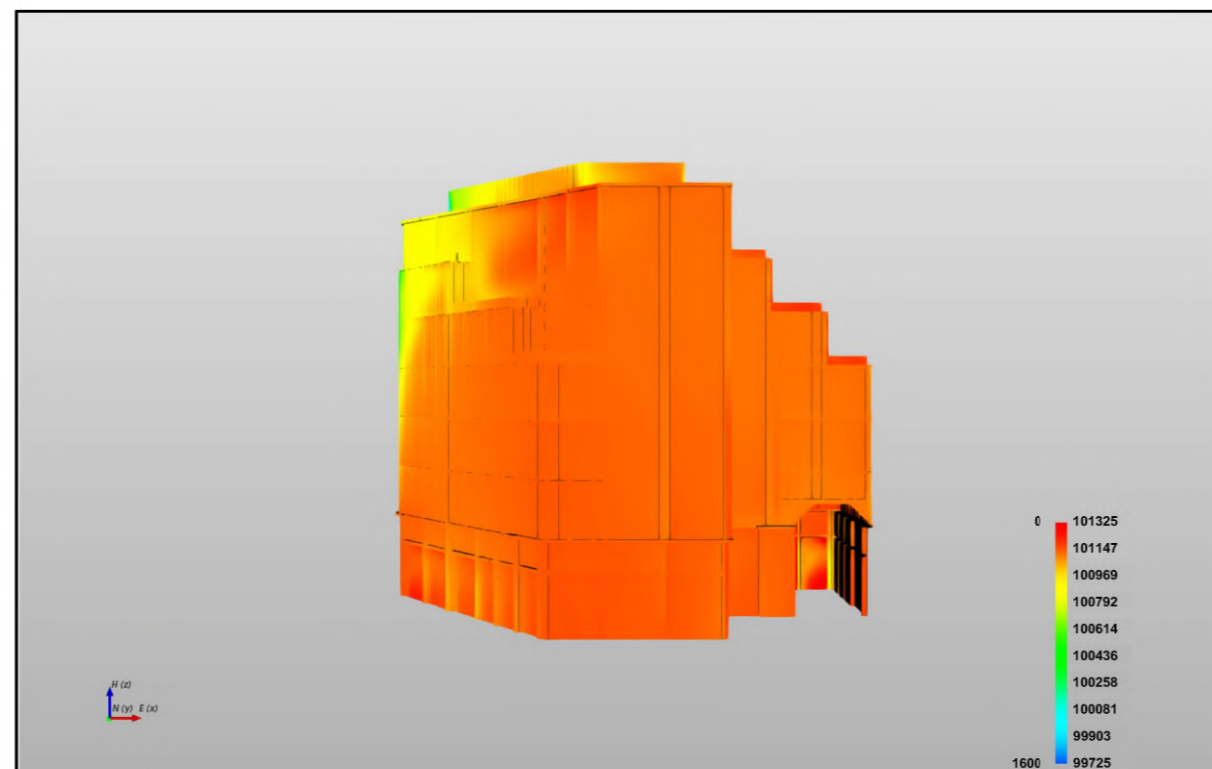
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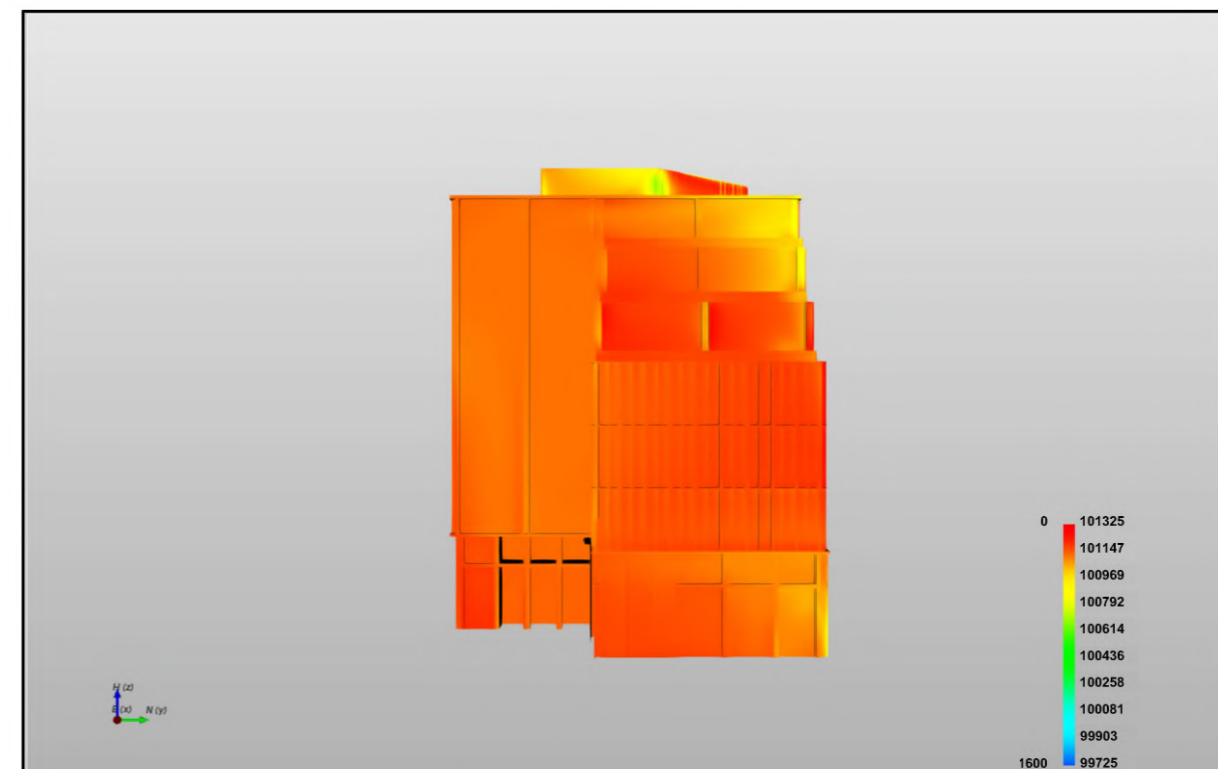
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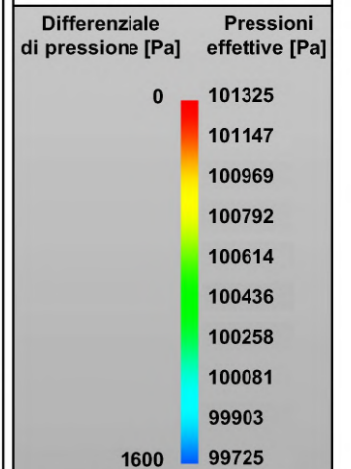


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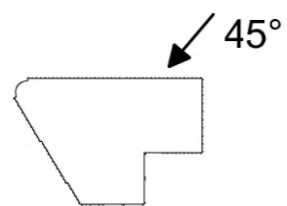
PROSPETTO EST

LEGENDA



CASO 2: VENTO 45°

PRESSIONI ESTERNE POSITIVE [Pa]



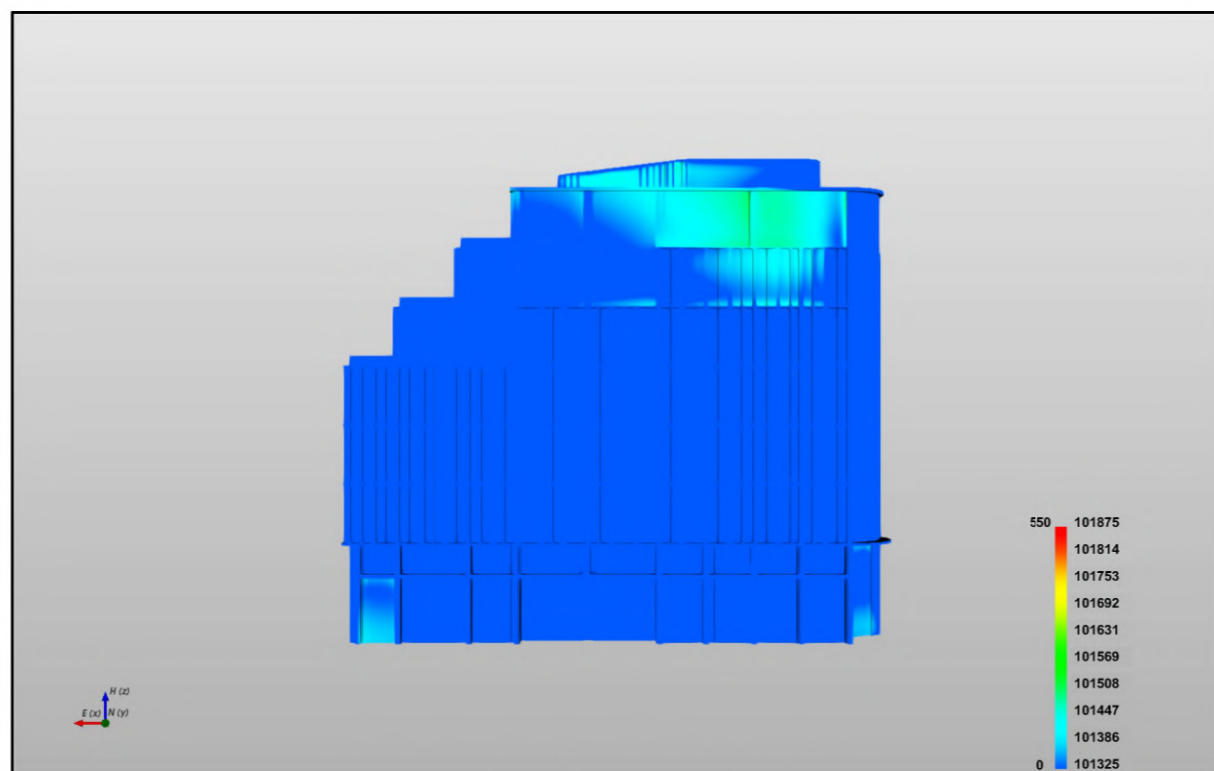
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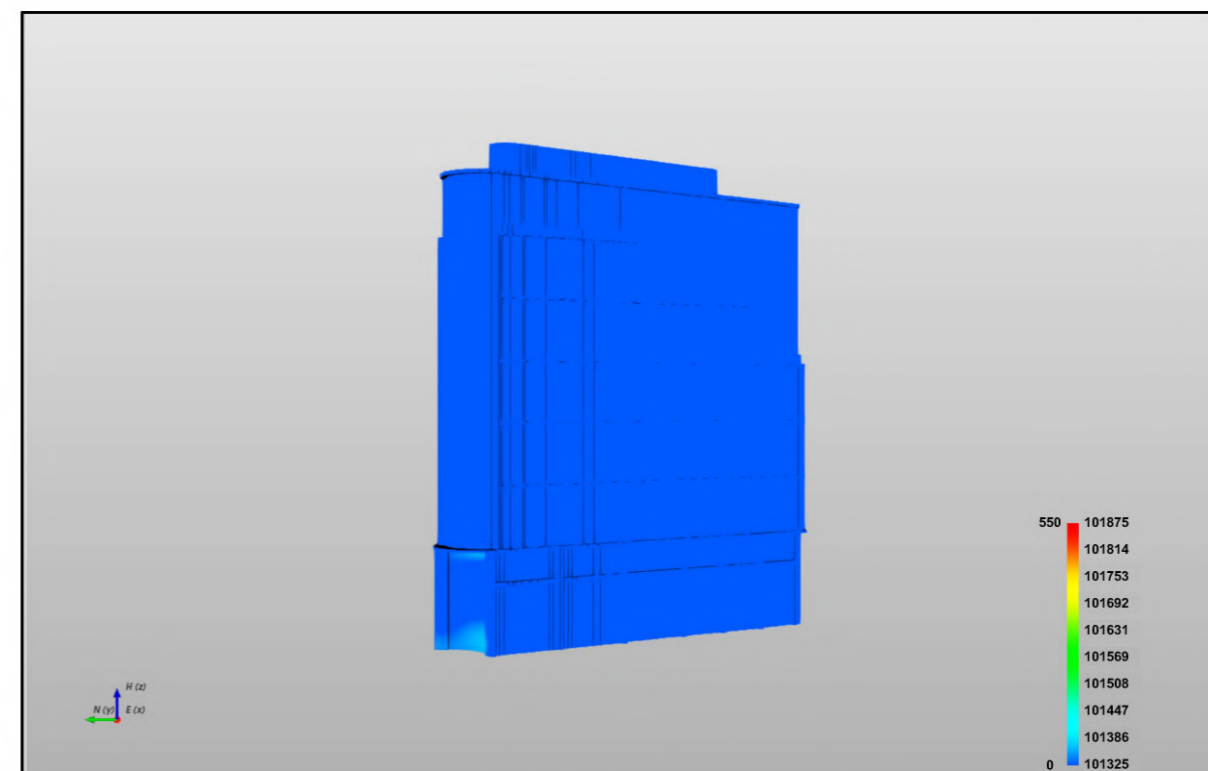
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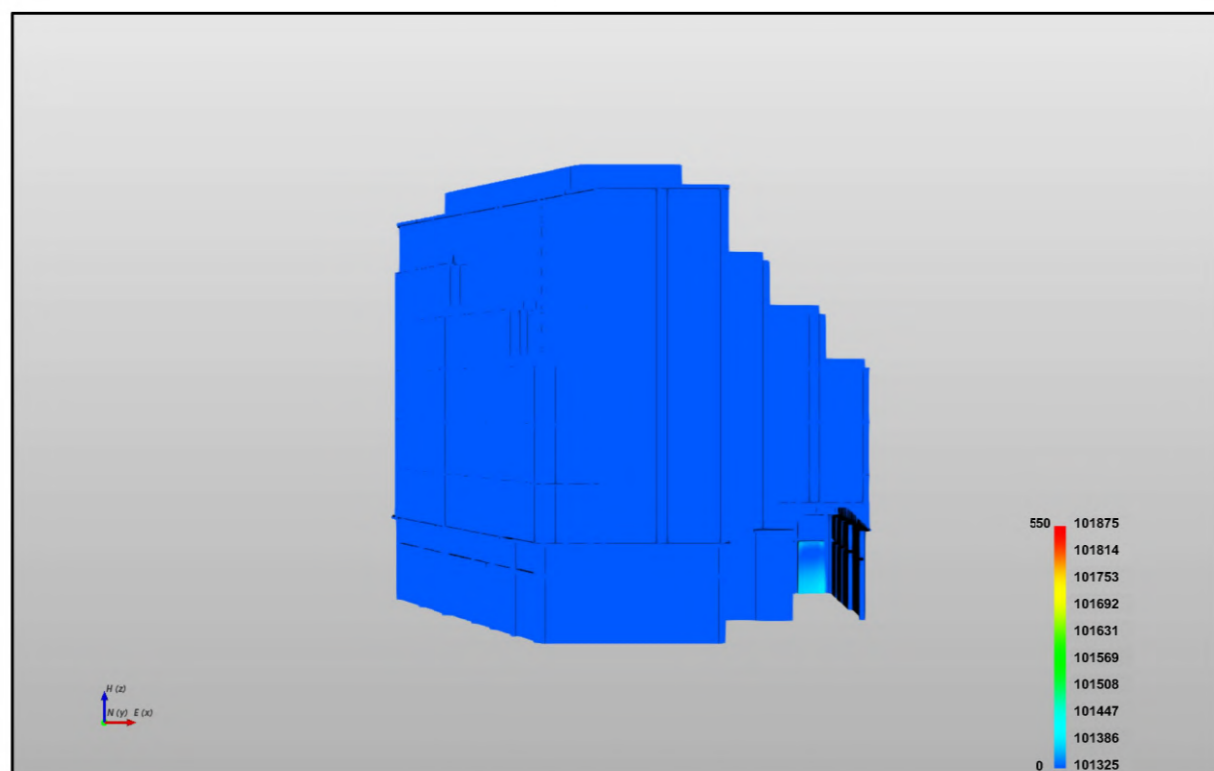
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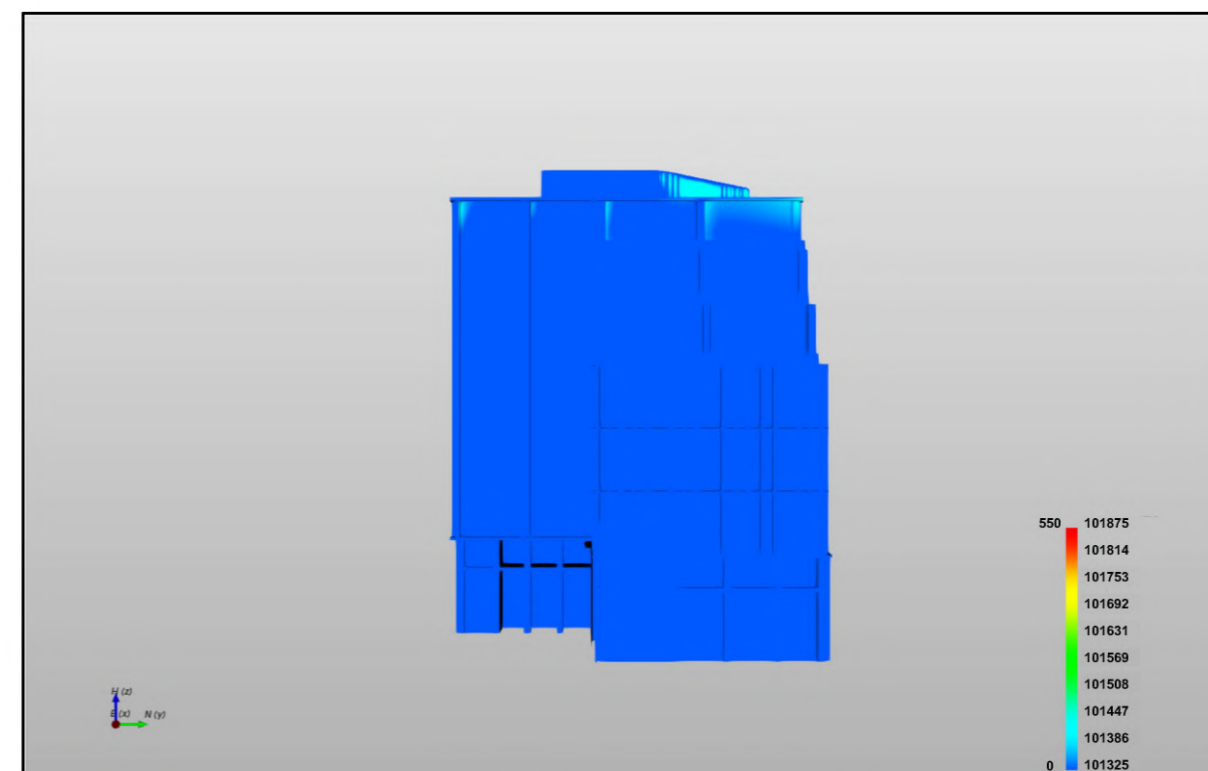
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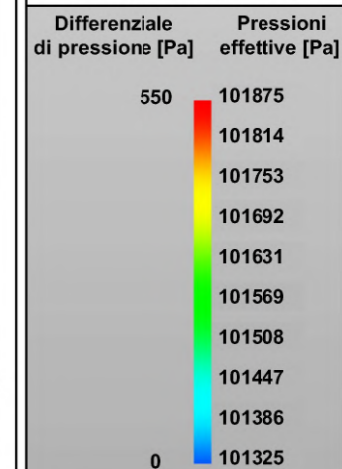


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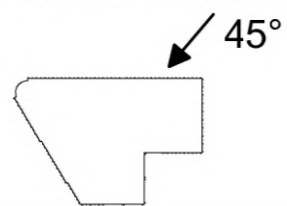
PROSPETTO EST

LEGENDA



CASO 2: VENTO 45°

PRESSIONI ESTERNE NEGATIVE [Pa]



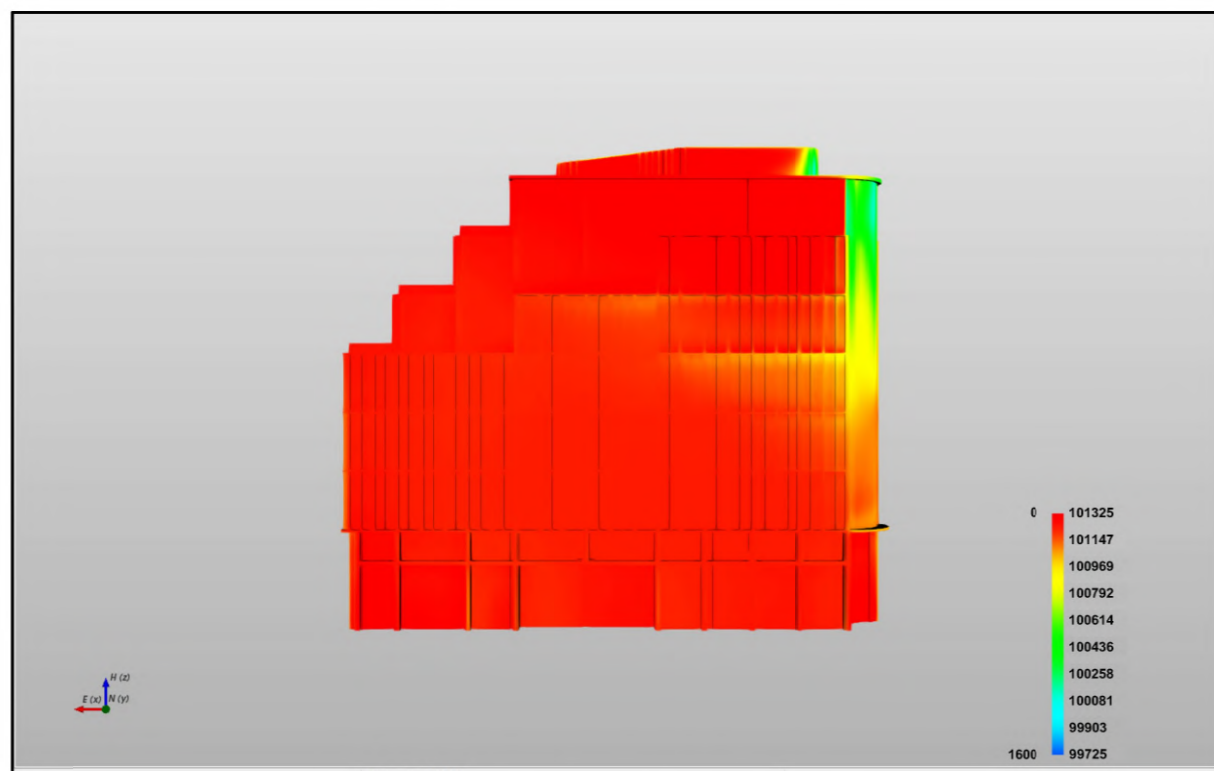
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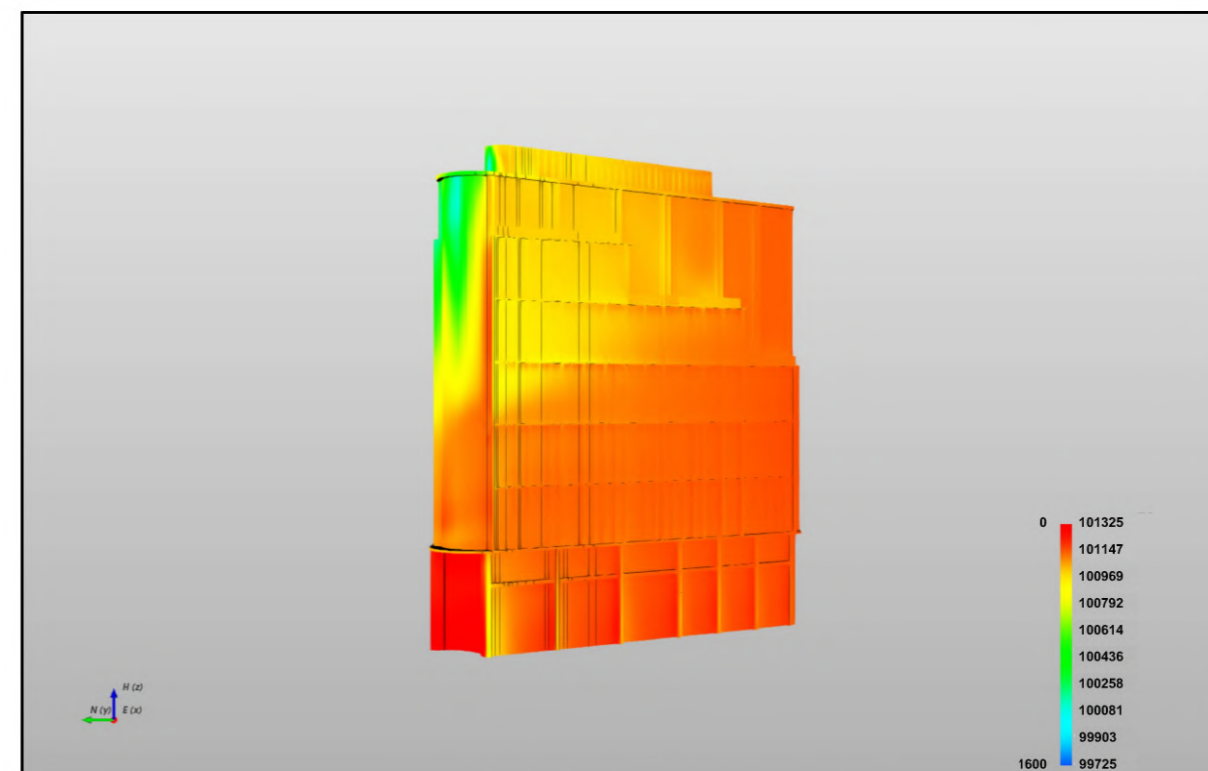
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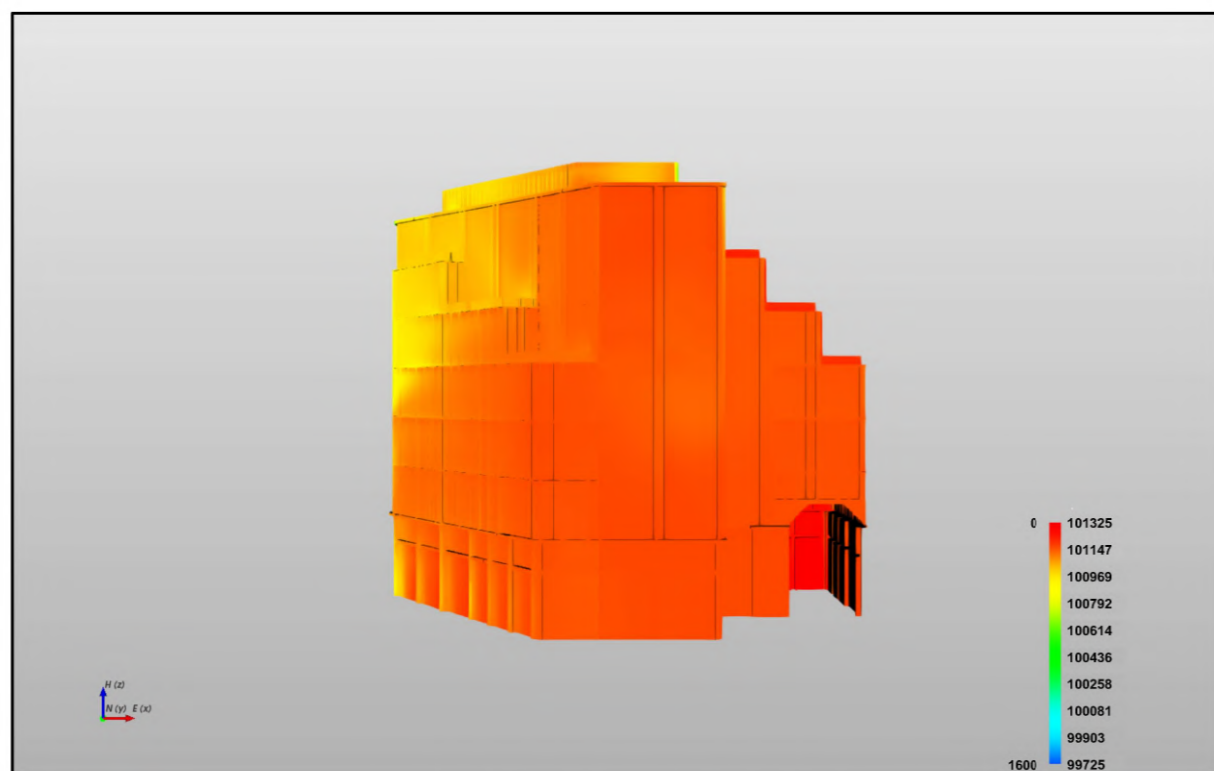
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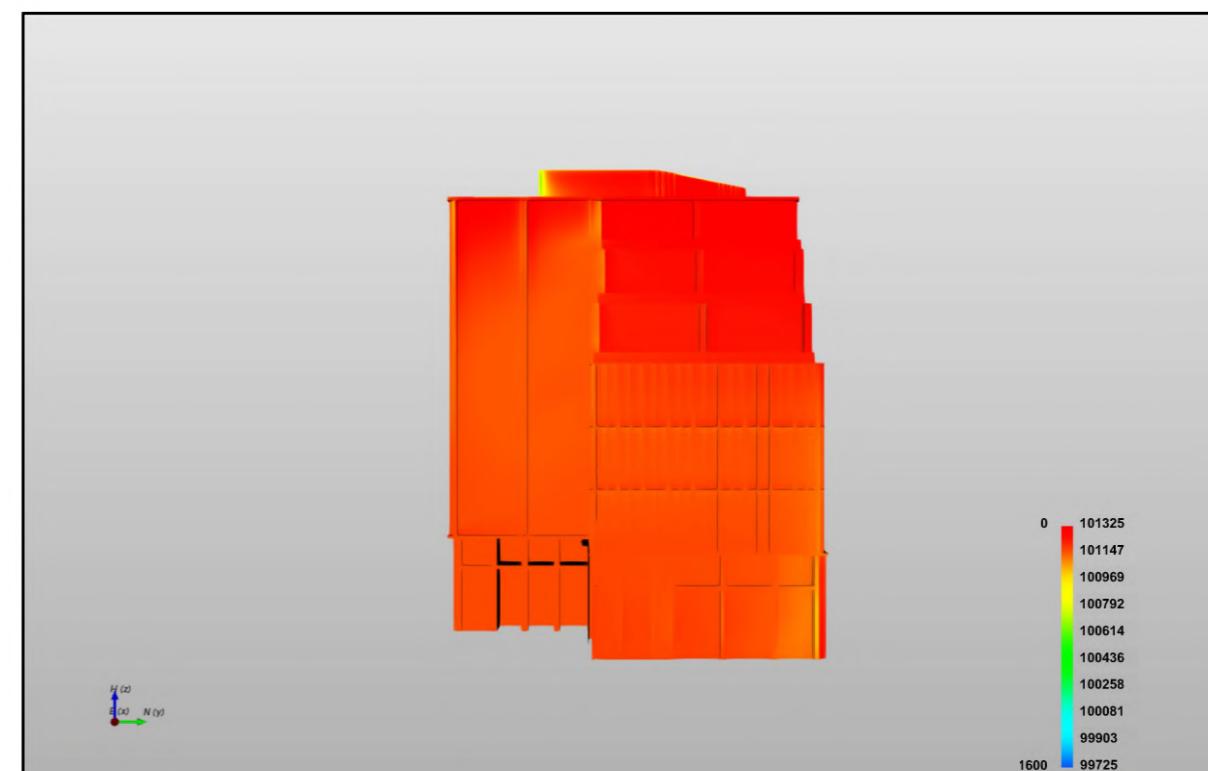
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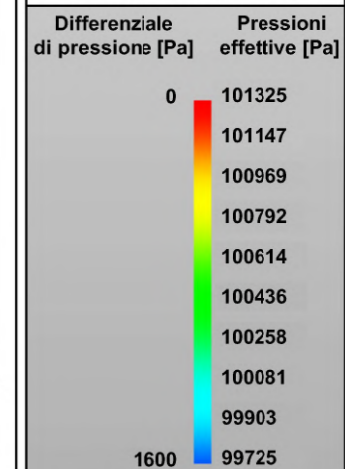


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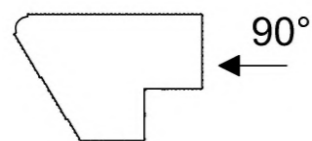
PROSPETTO EST

LEGENDA



CASO 3: VENTO 90°

PRESSIONI ESTERNE POSITIVE [Pa]



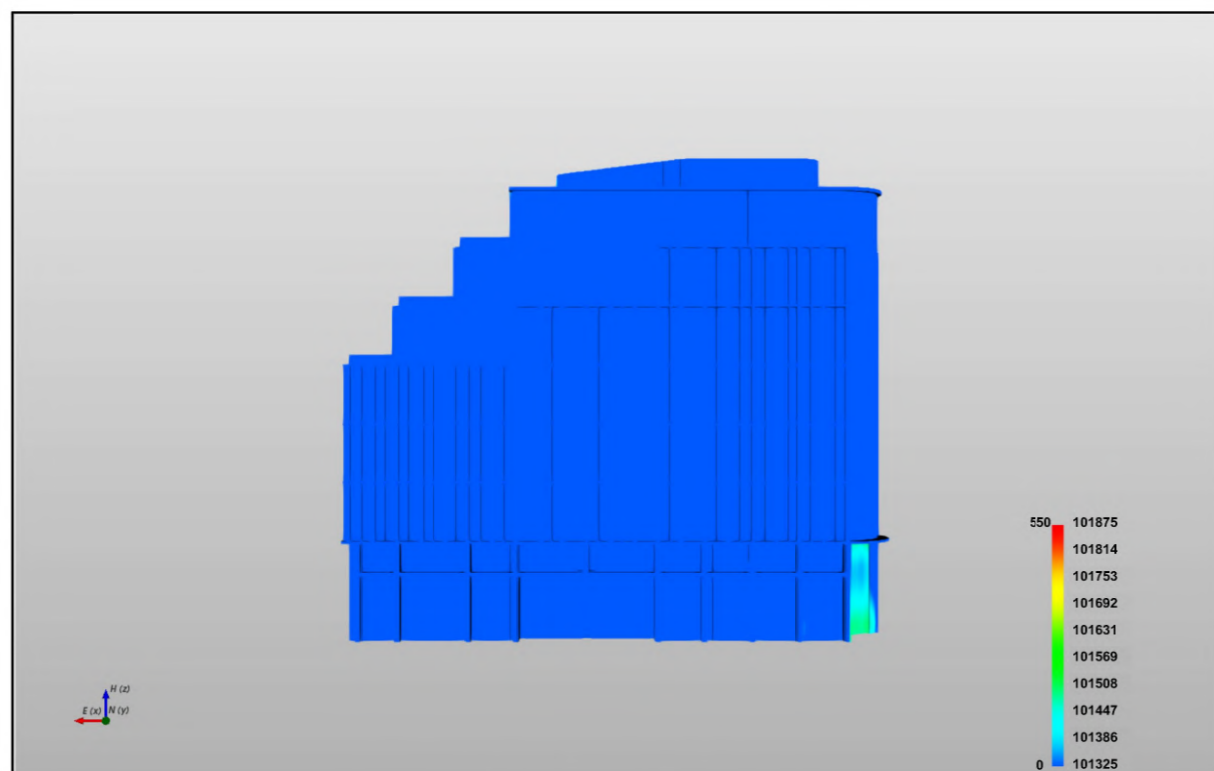
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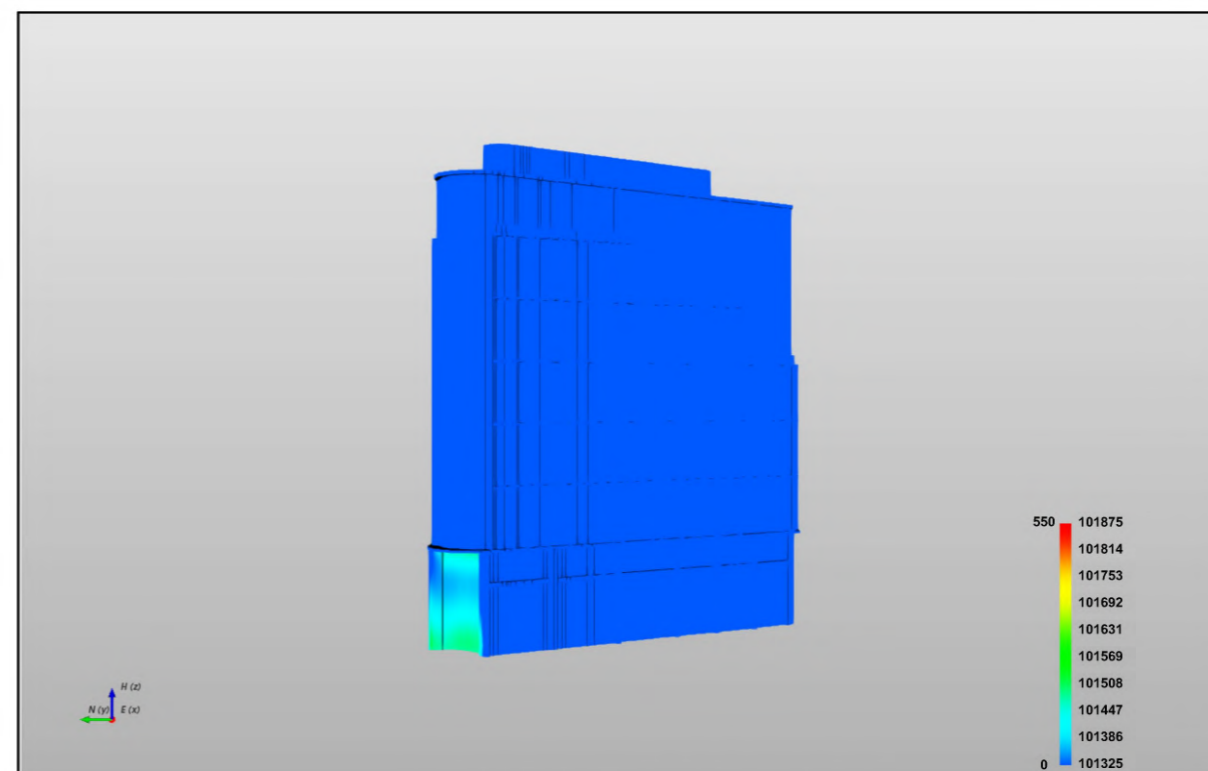
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ALLEGATO

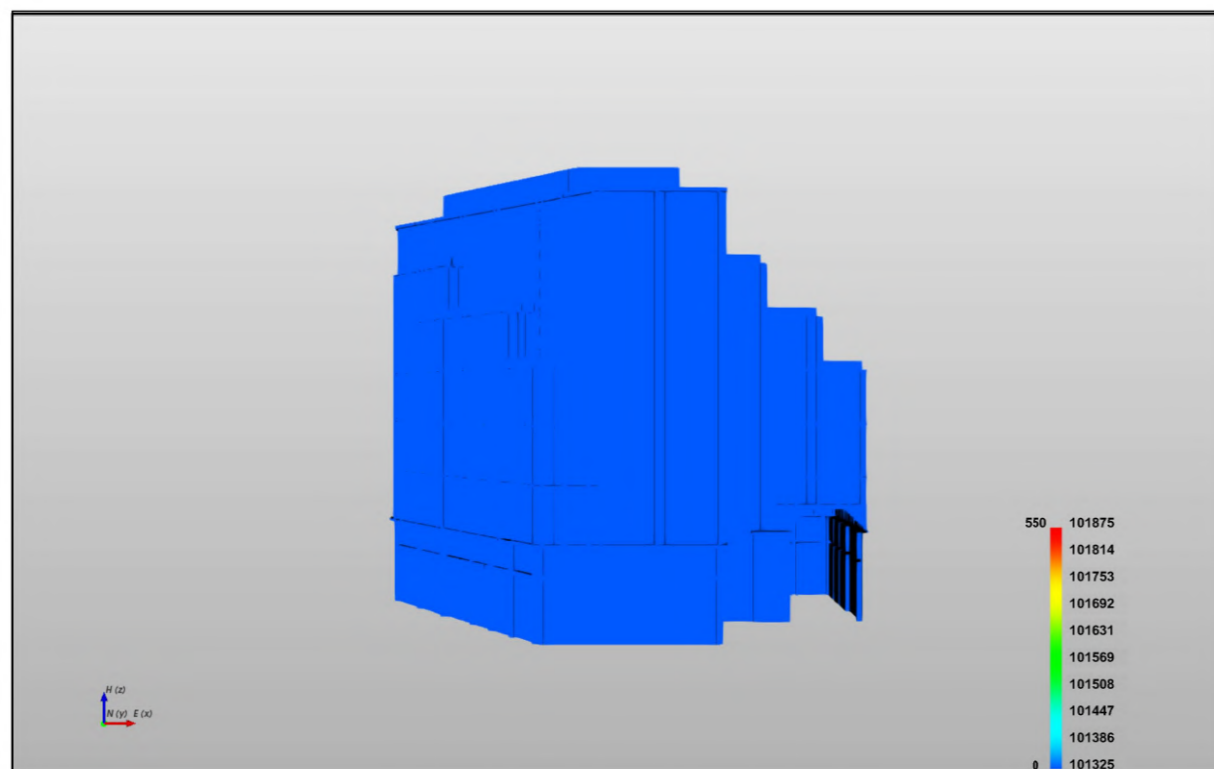
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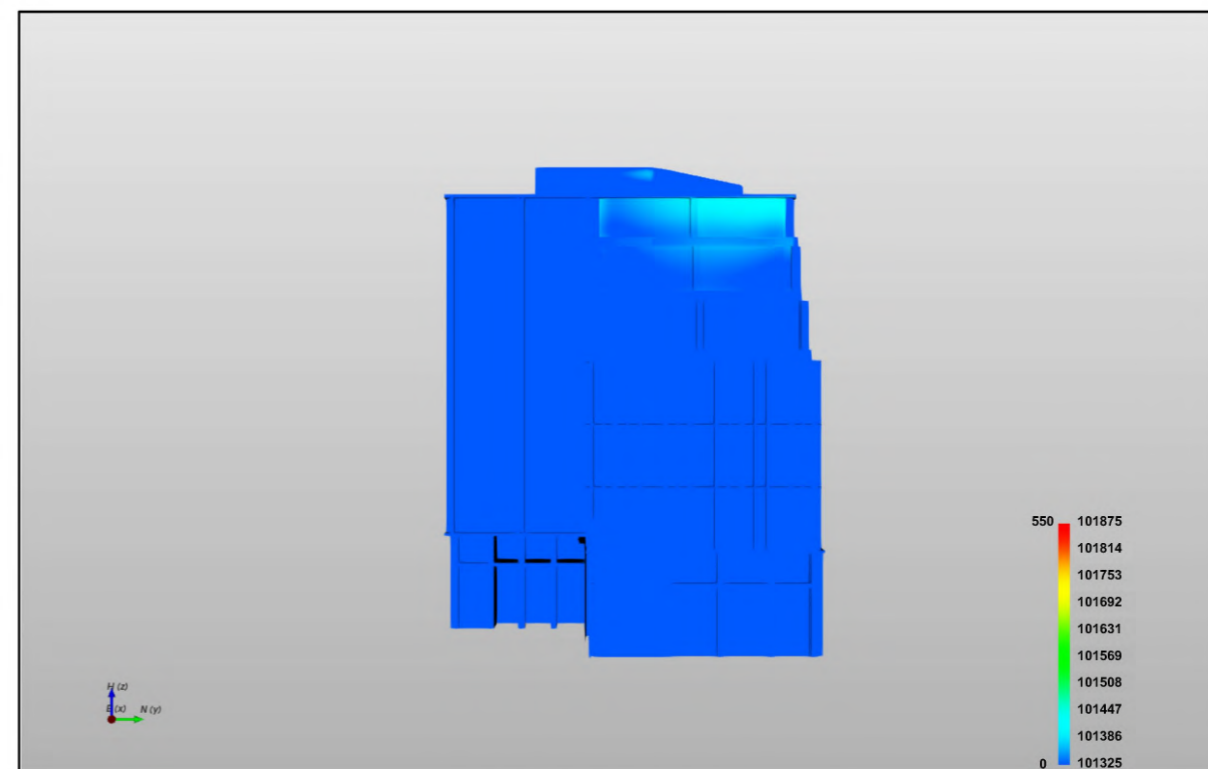
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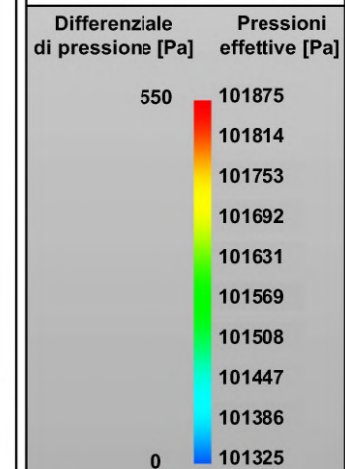


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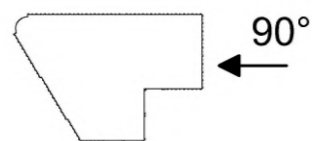
PROSPETTO EST

LEGENDA



CASO 3: VENTO 90°

PRESSIONI ESTERNE NEGATIVE [Pa]



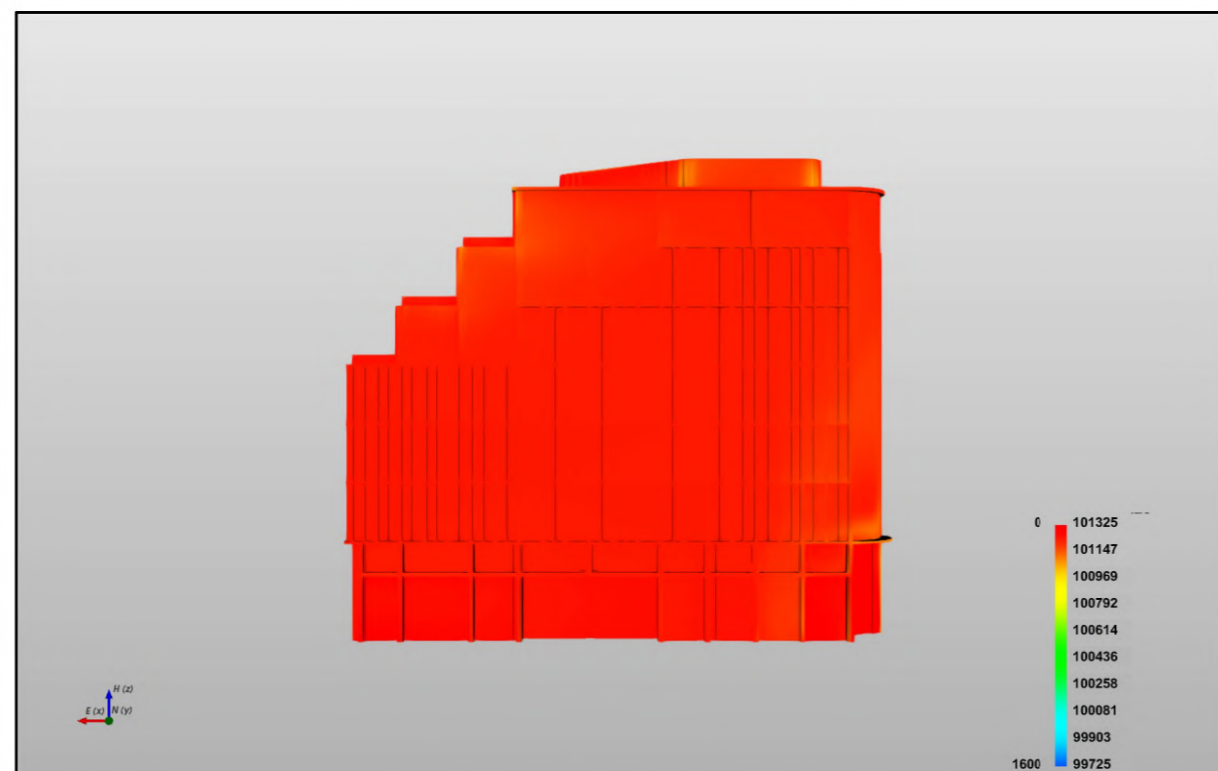
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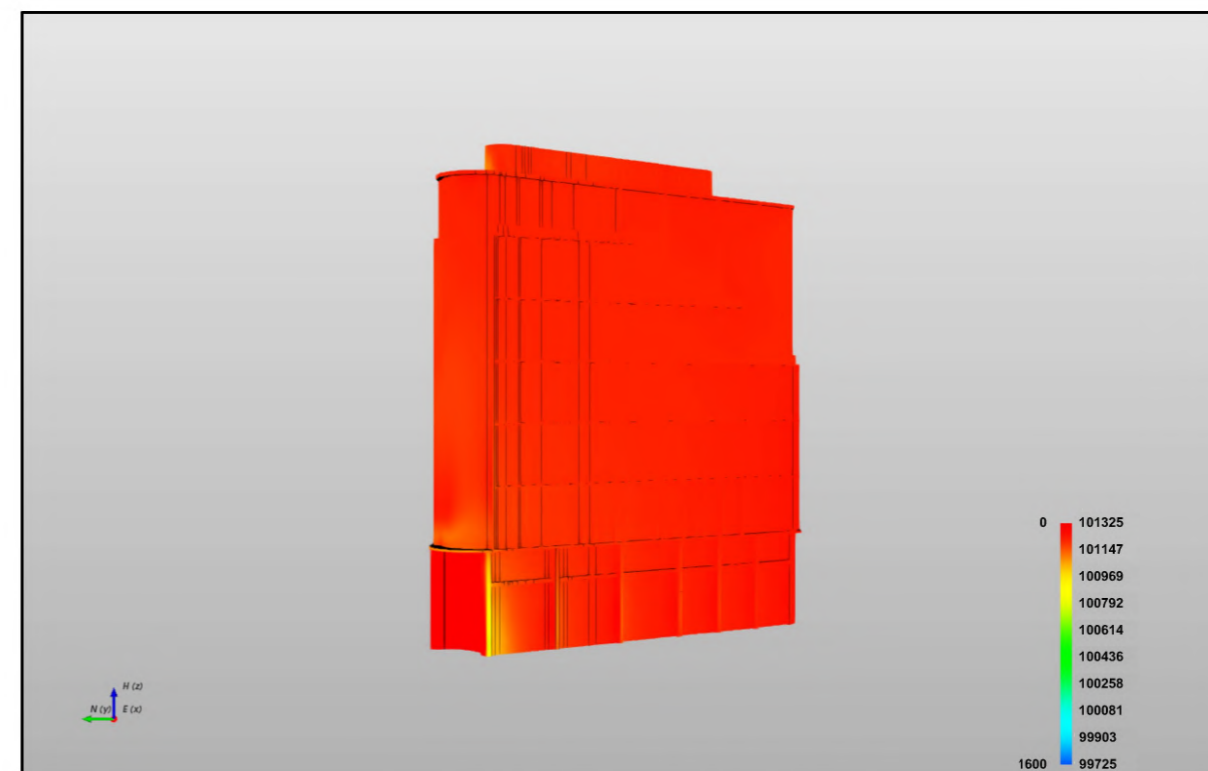
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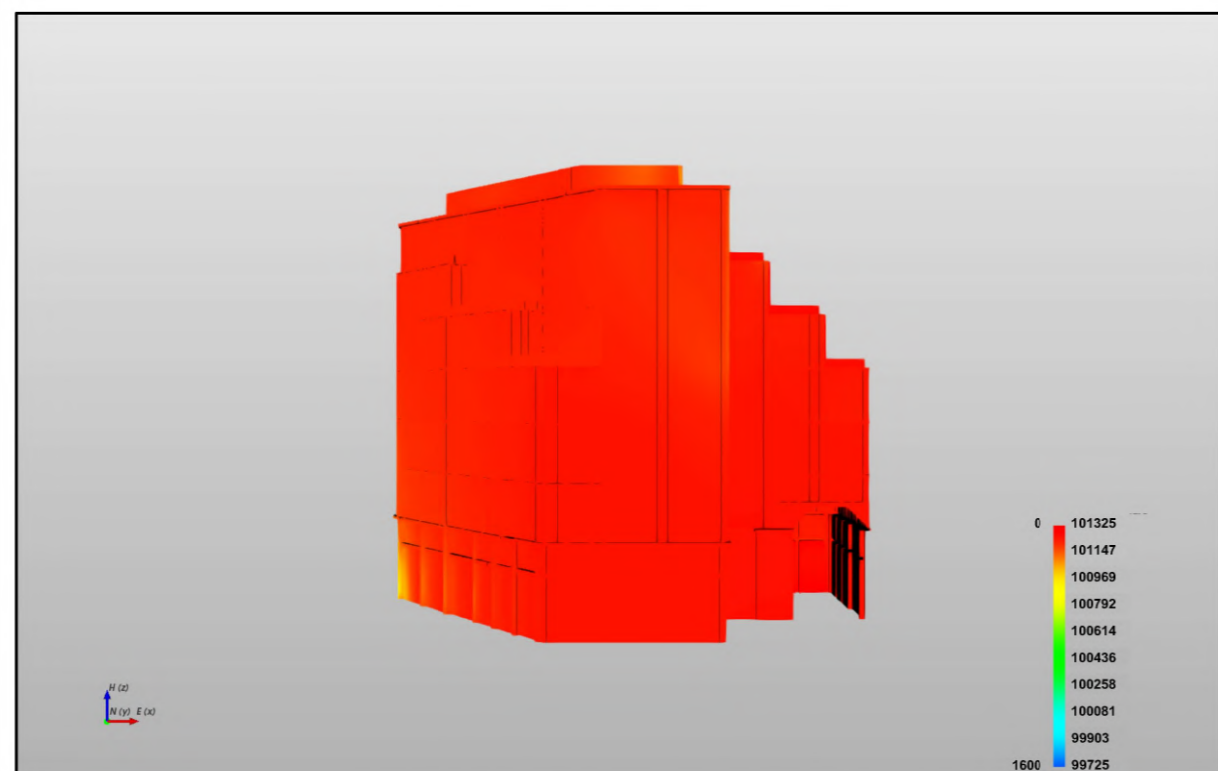
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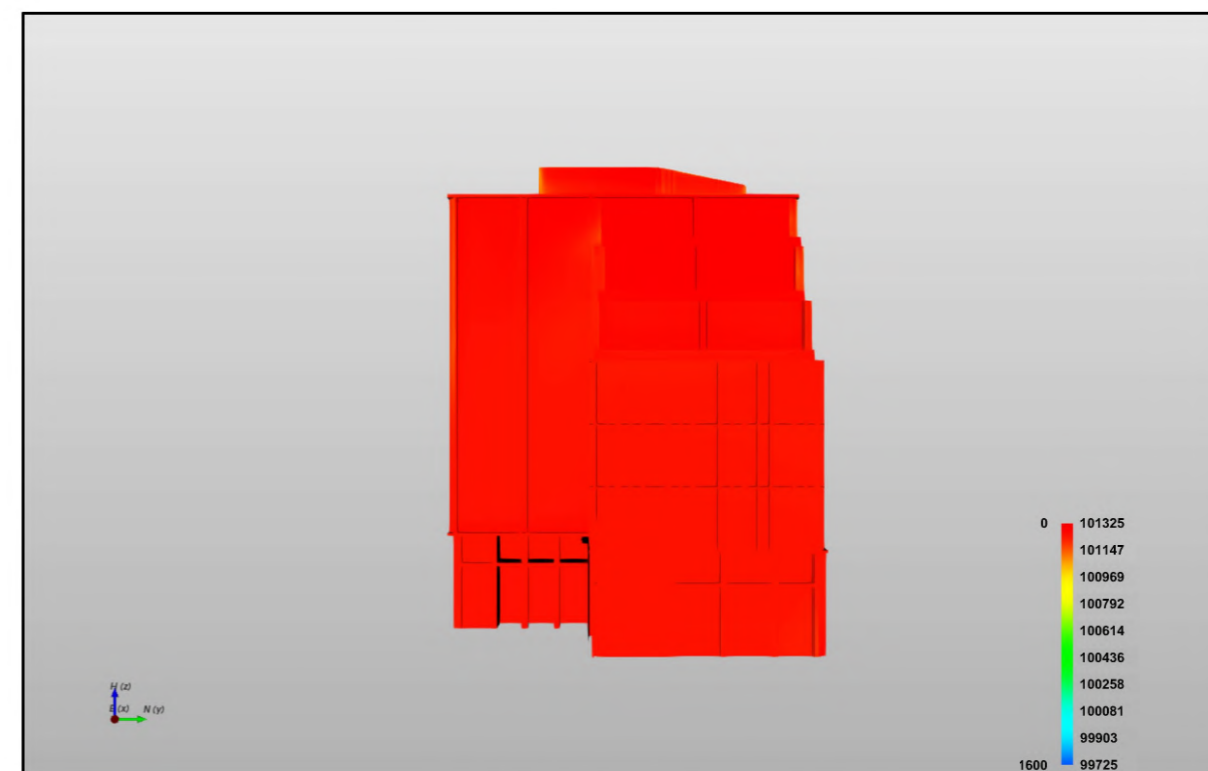
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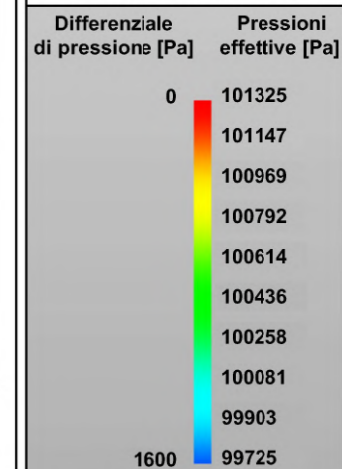


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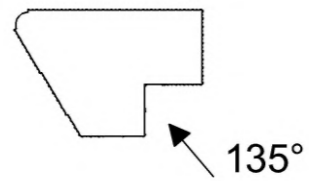
PROSPETTO EST

LEGENDA



CASO 4: VENTO 135°

PRESSIONI ESTERNE POSITIVE [Pa]



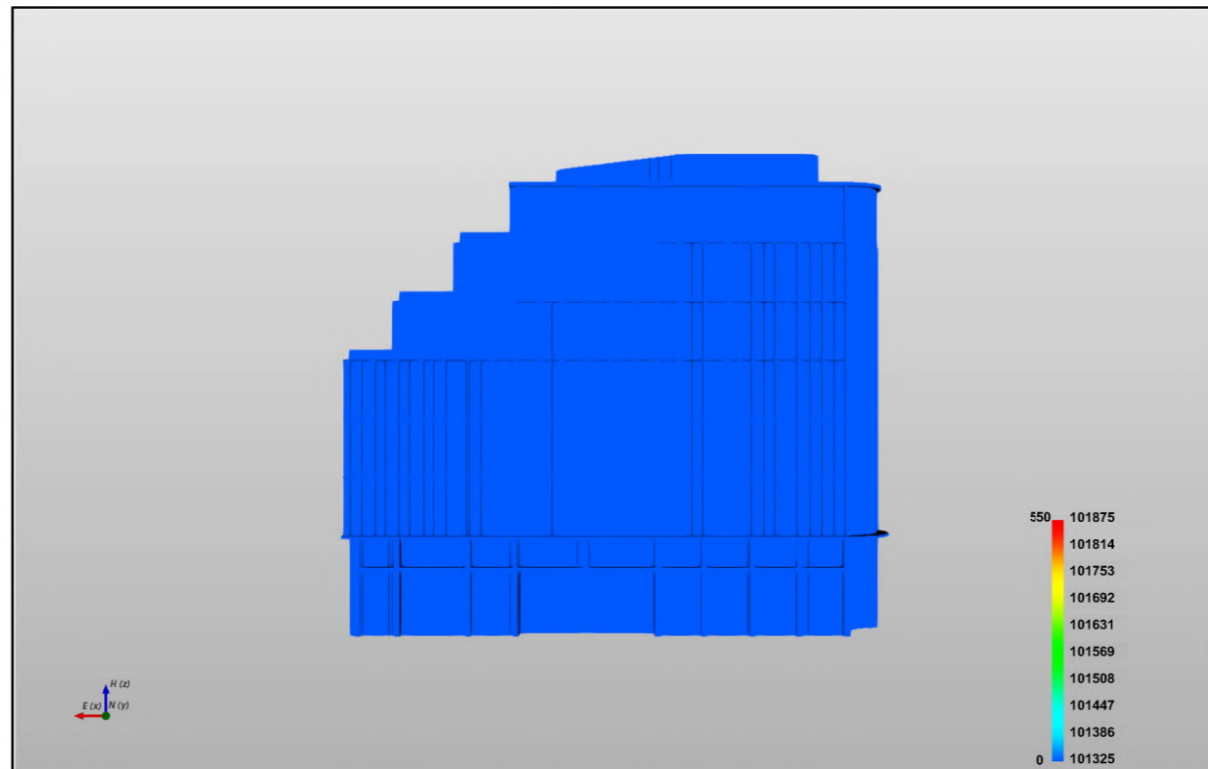
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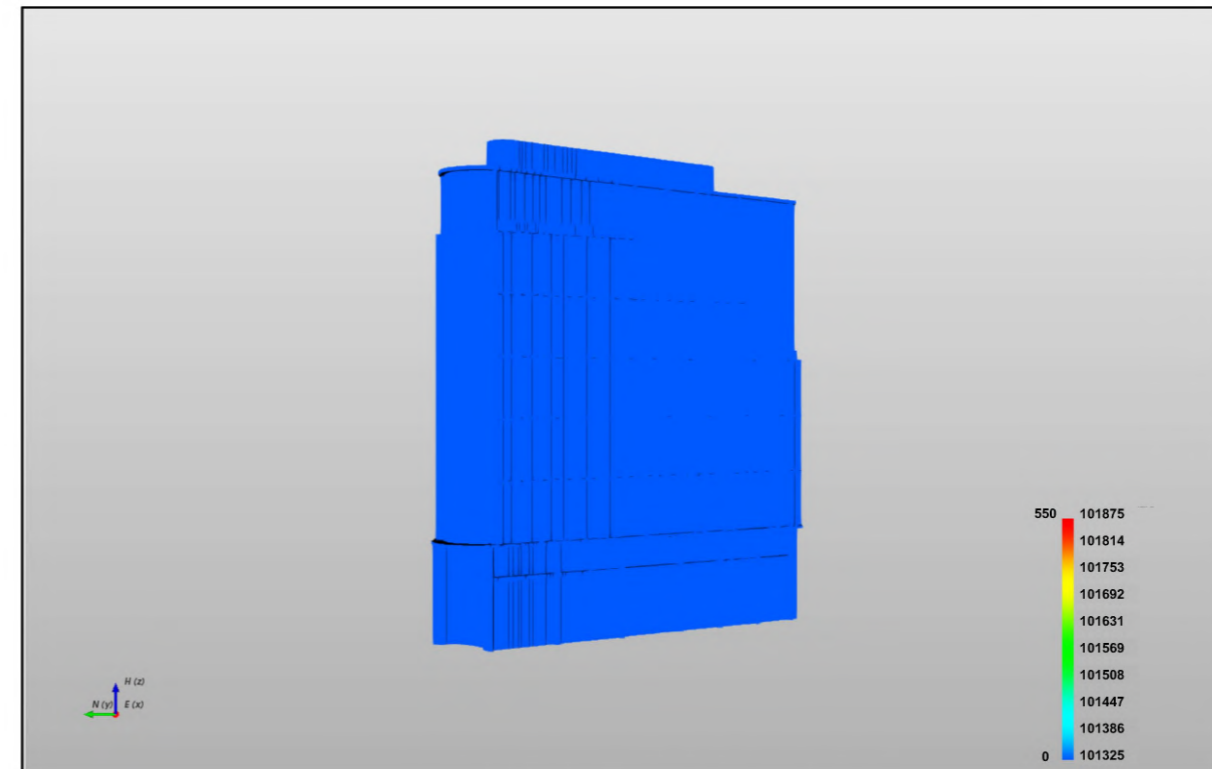
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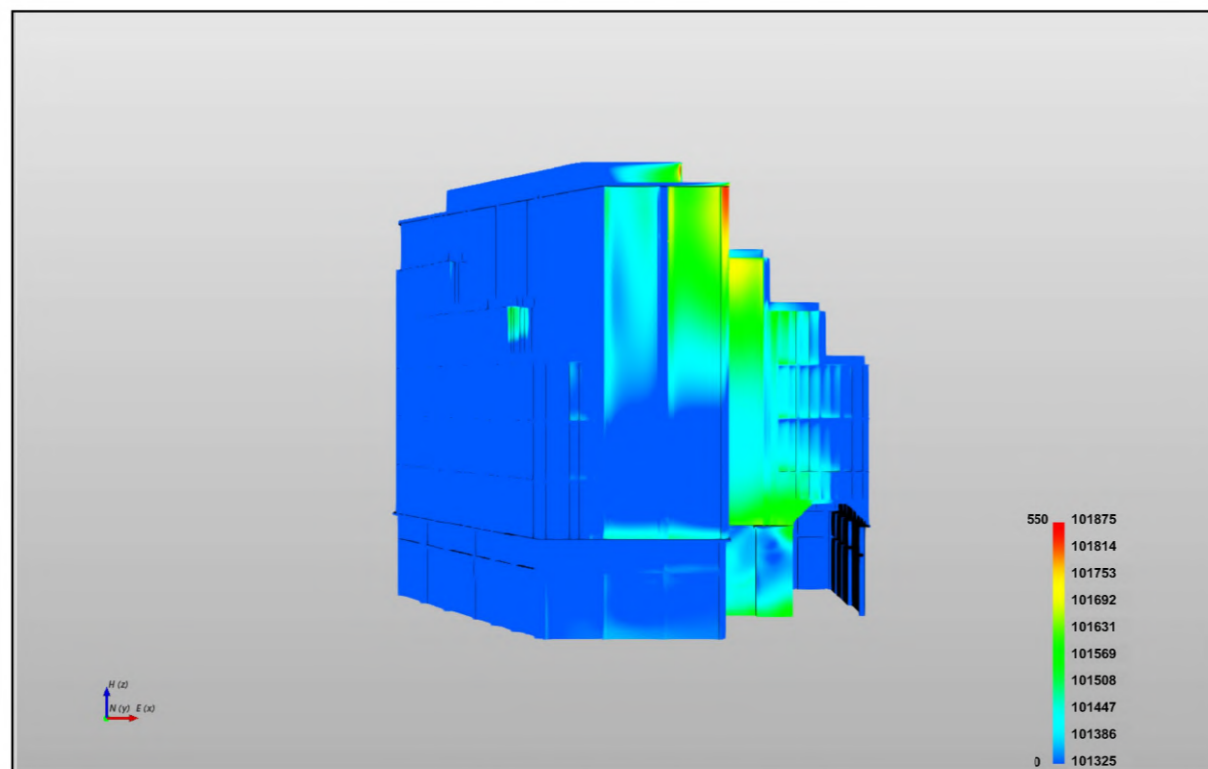
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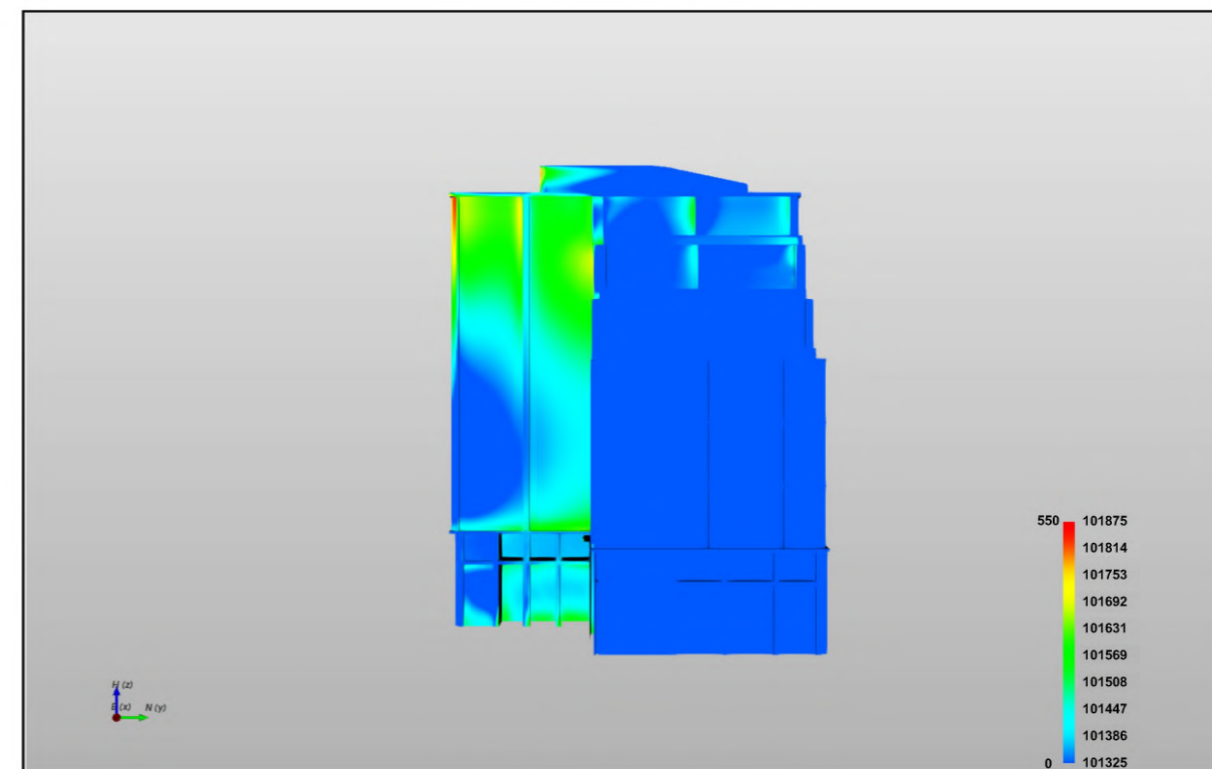
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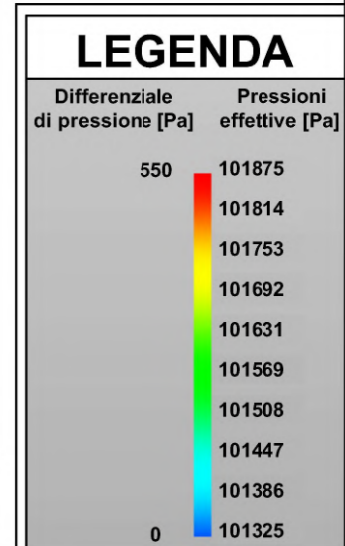
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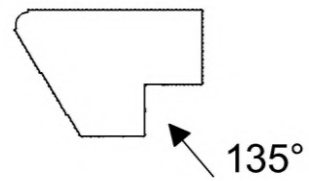


PROSPETTO EST



CASO 4: VENTO 135°

PRESSIONI ESTERNE NEGATIVE [Pa]



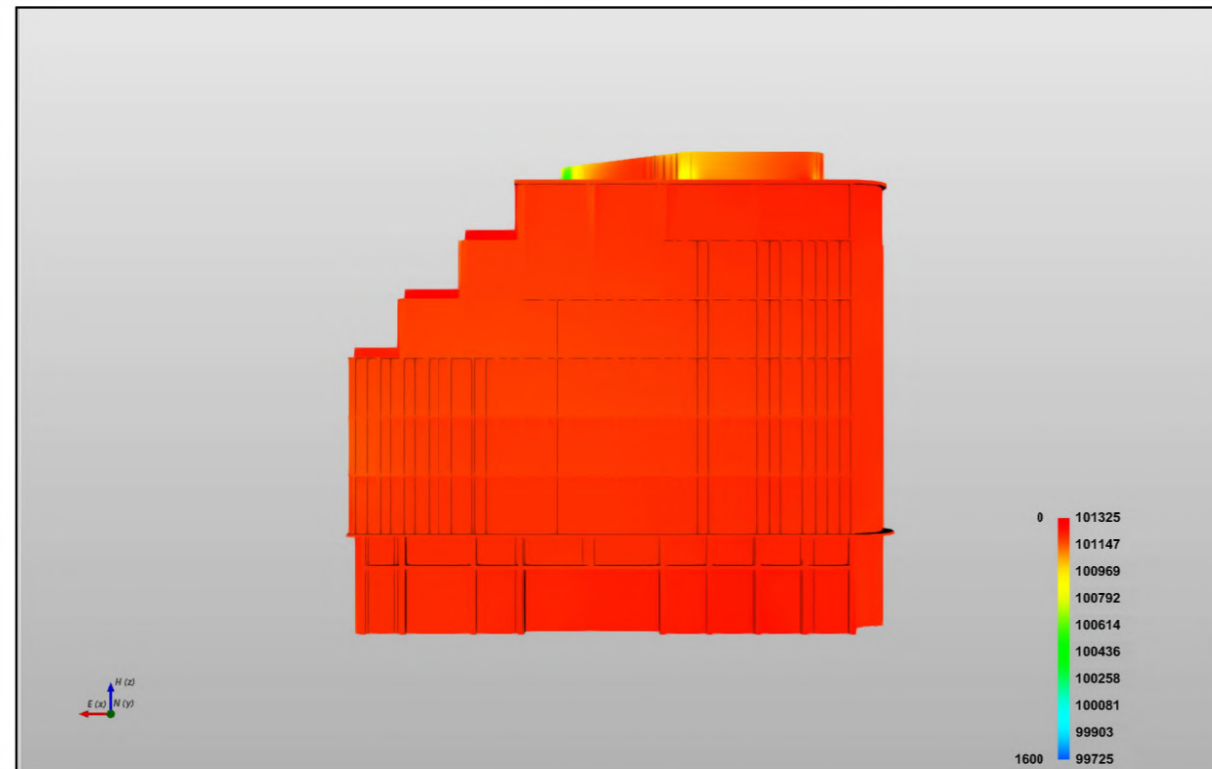
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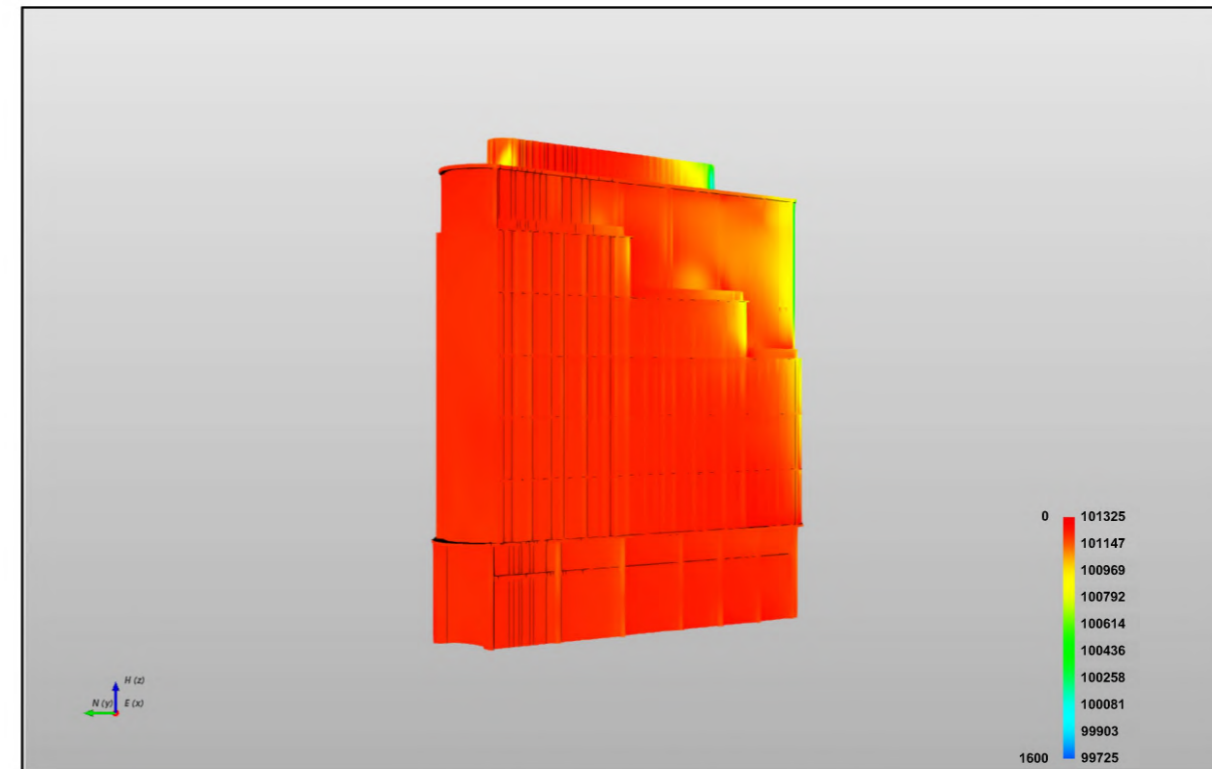
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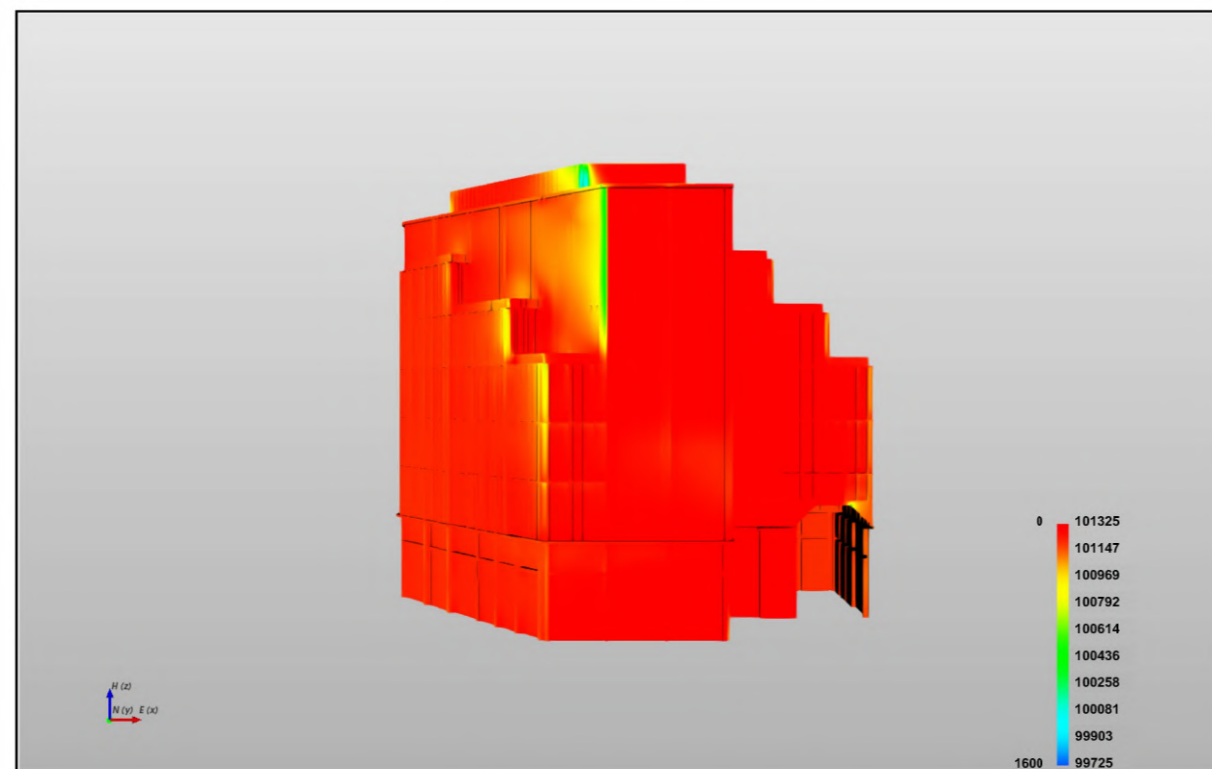
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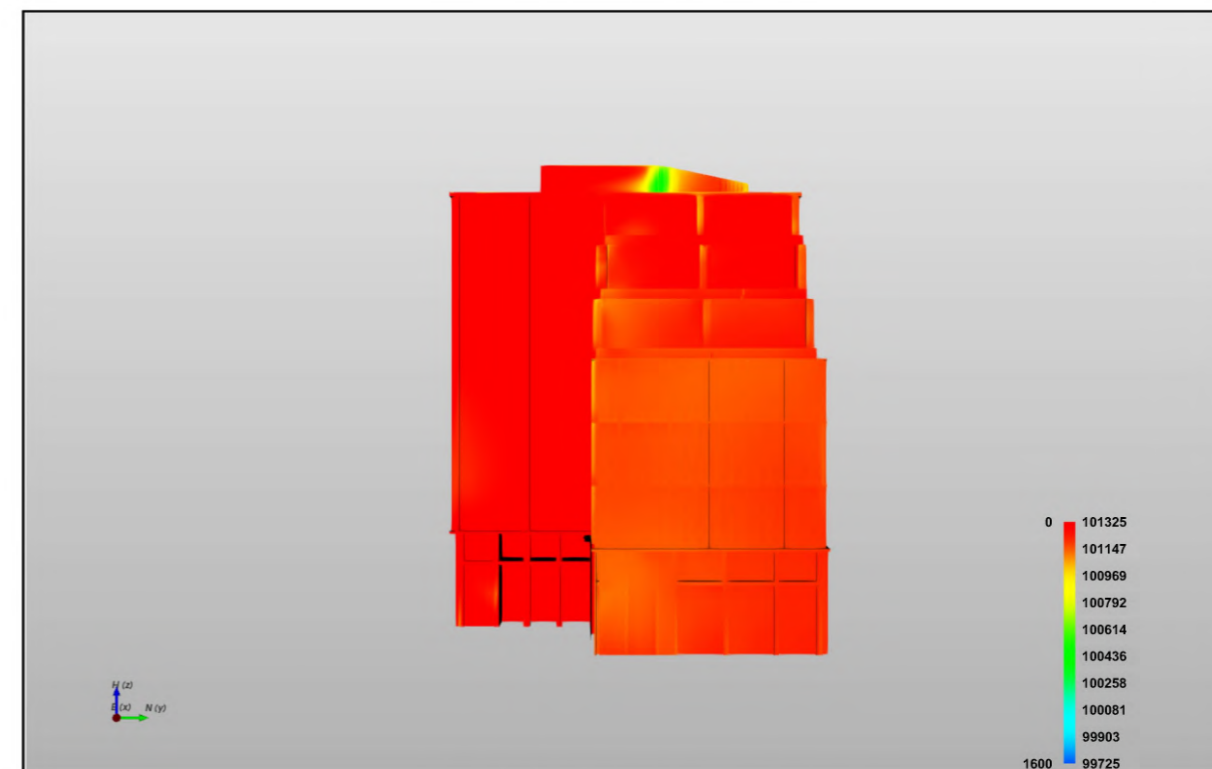
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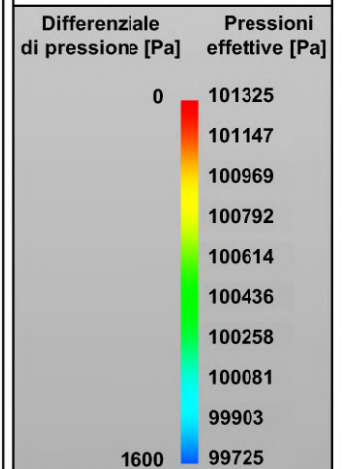


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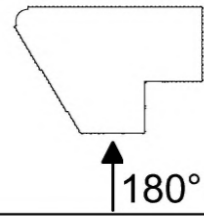
PROSPETTO EST

LEGENDA



CASO 5: VENTO 180°

PRESSIONI ESTERNE POSITIVE [Pa]



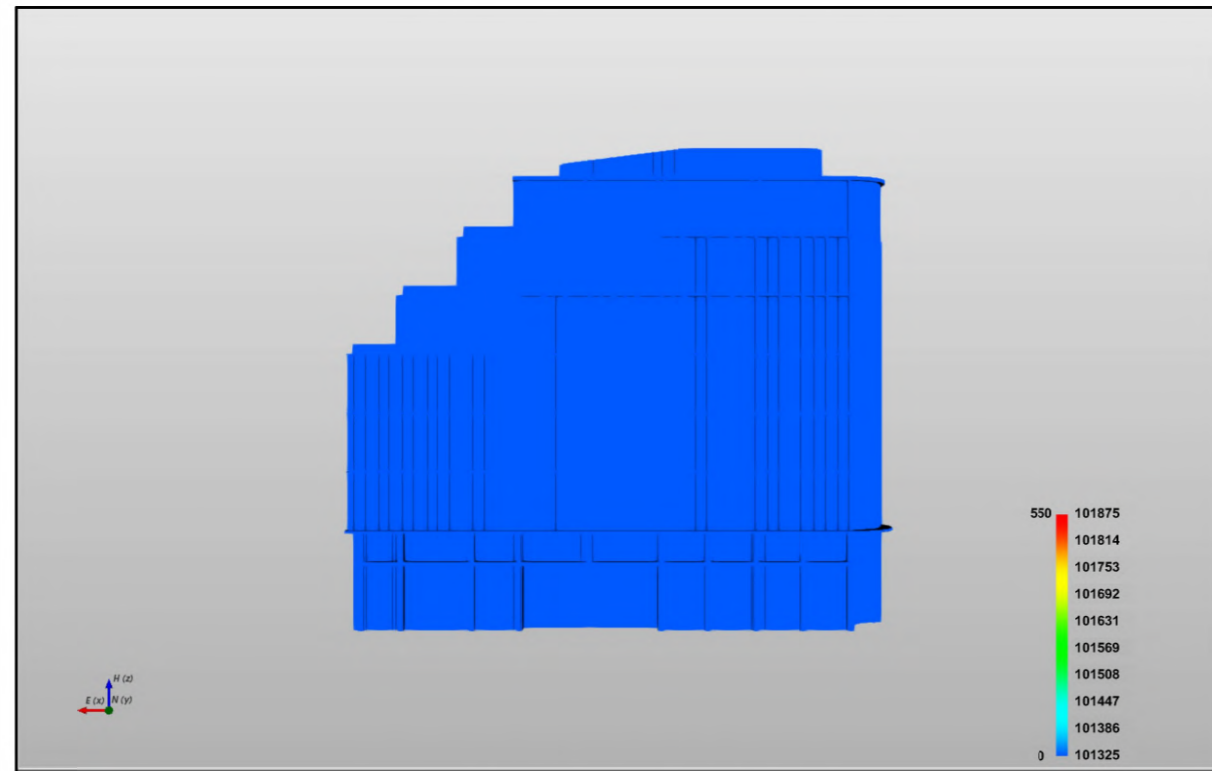
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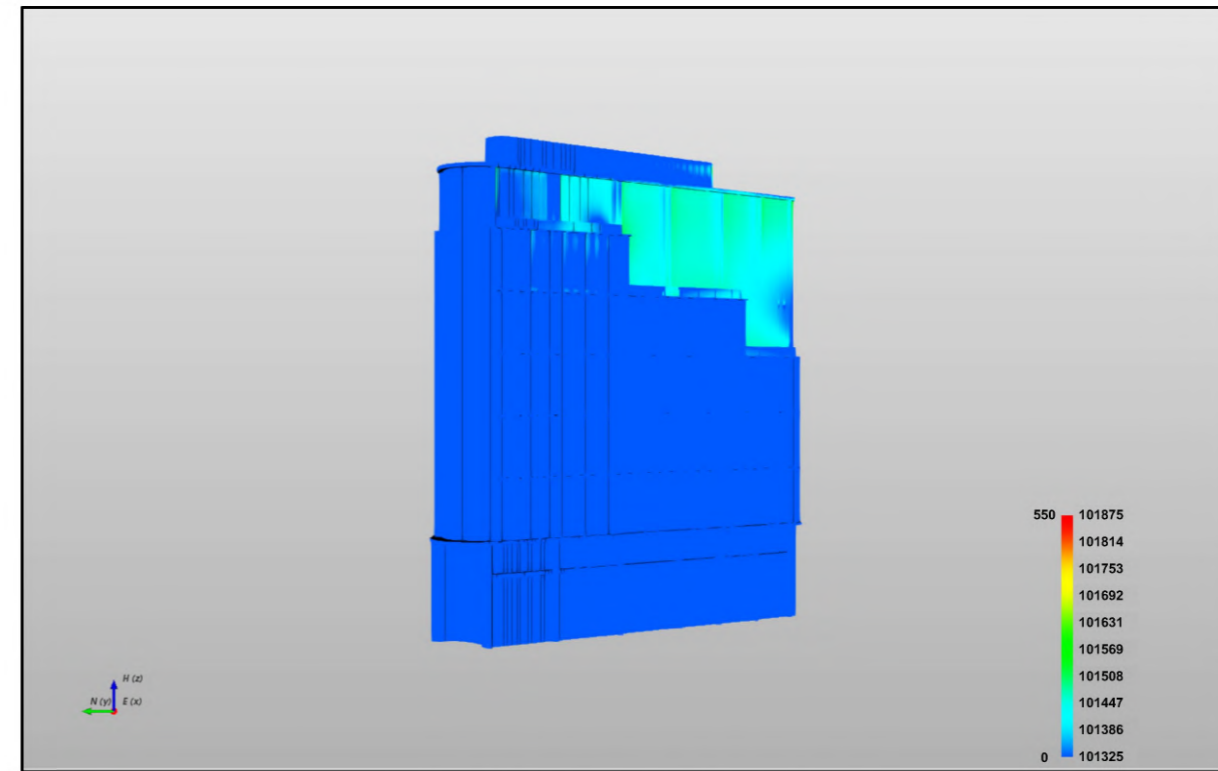
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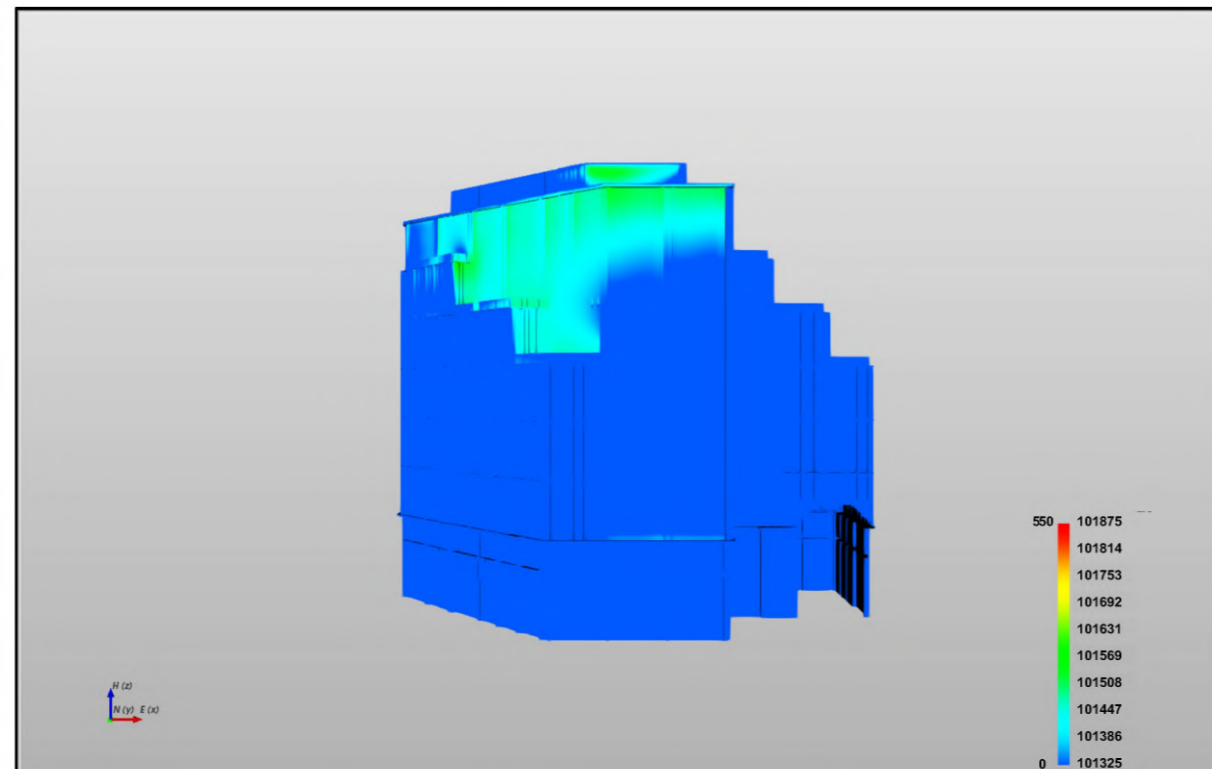
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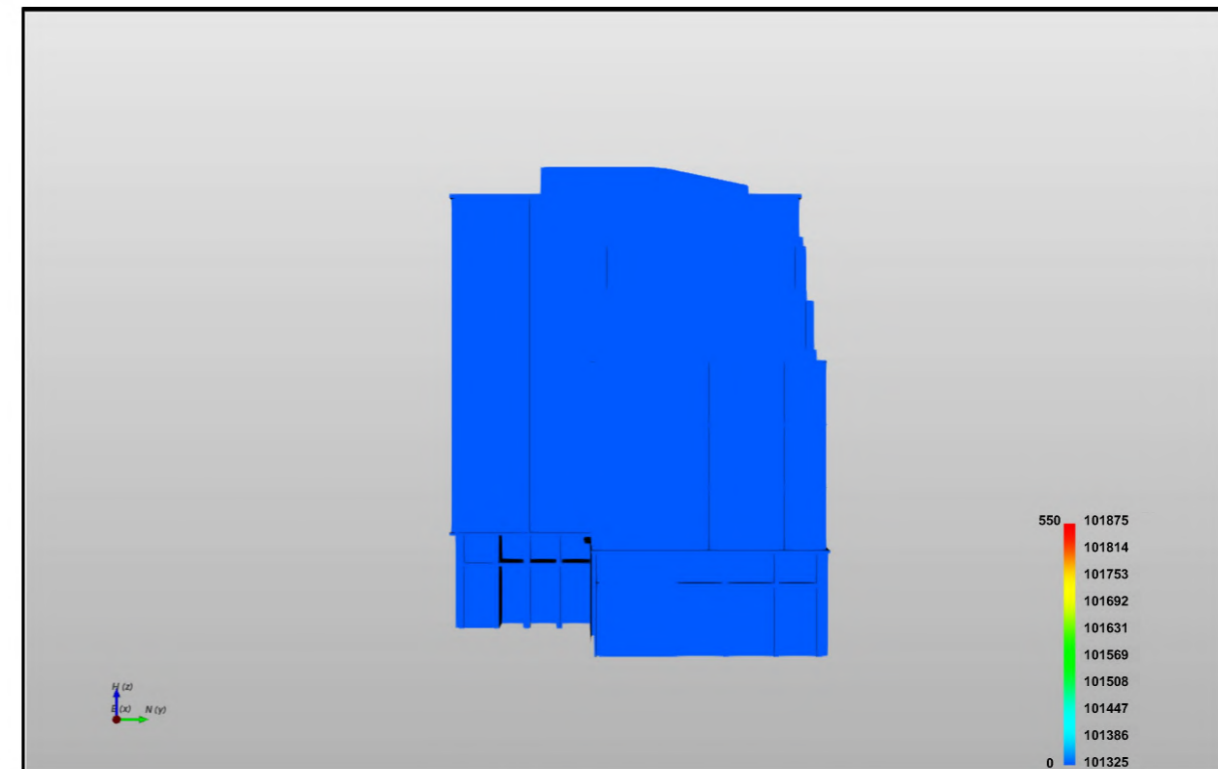
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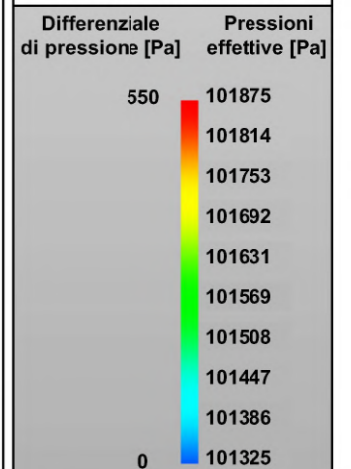


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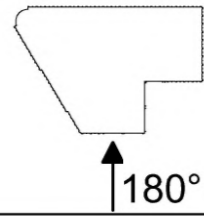
PROSPETTO EST

LEGENDA



CASO 5: VENTO 180°

PRESSIONI ESTERNE NEGATIVE [Pa]



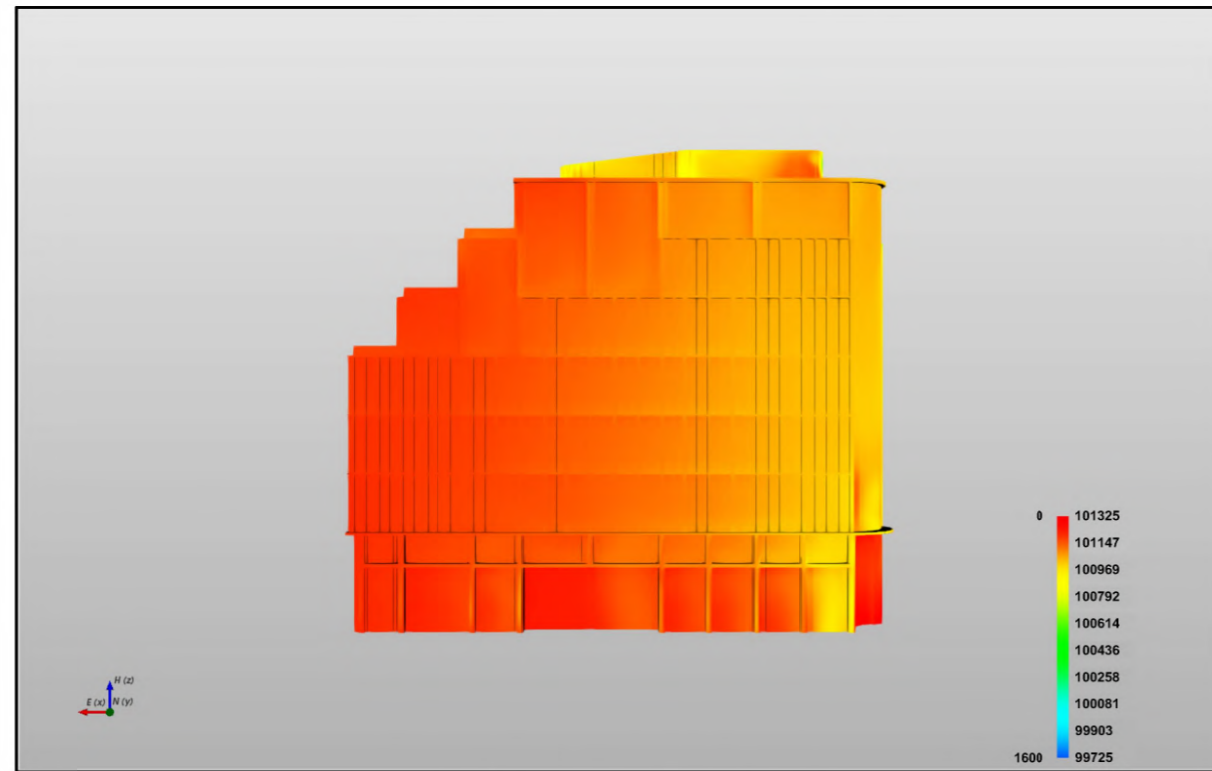
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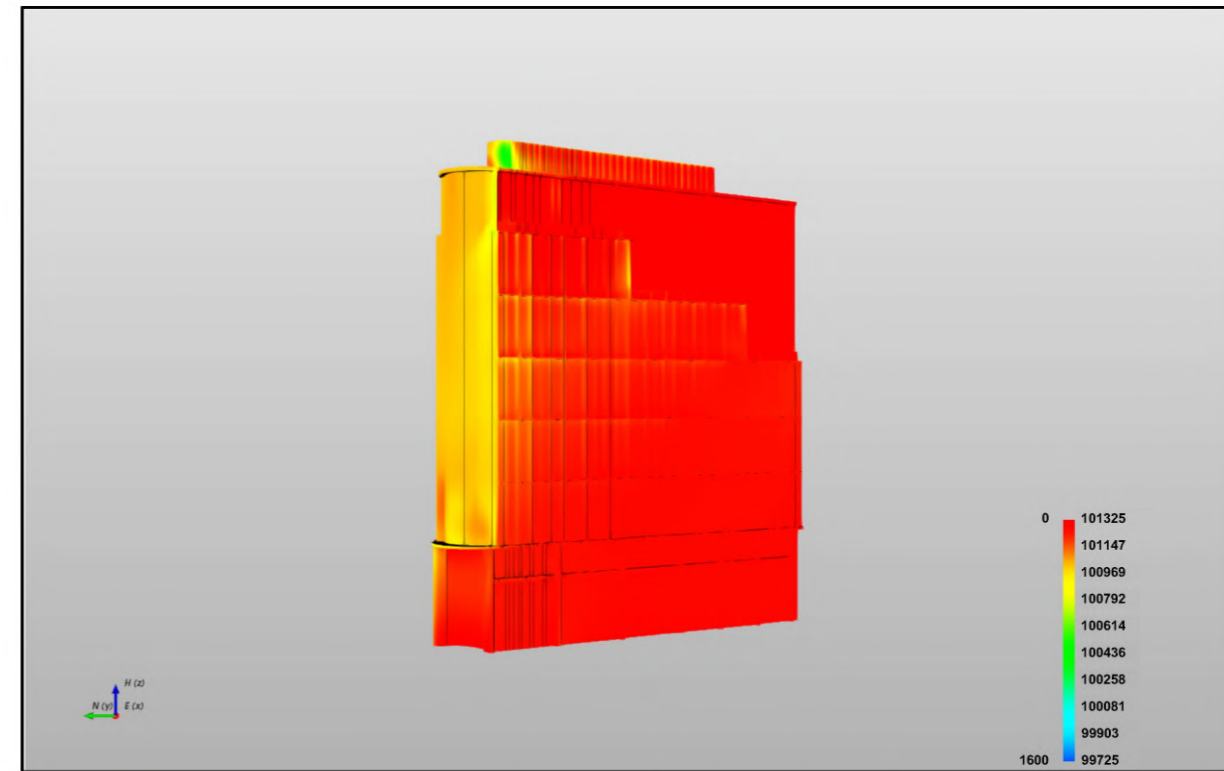
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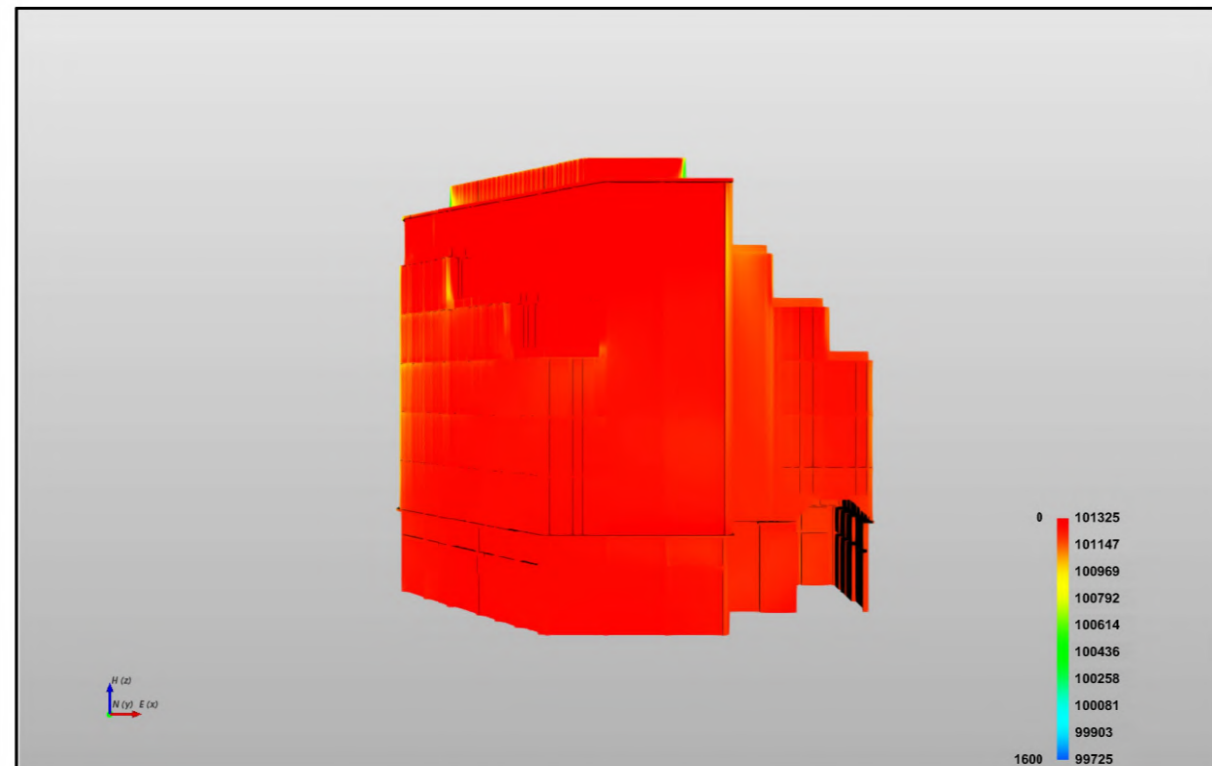
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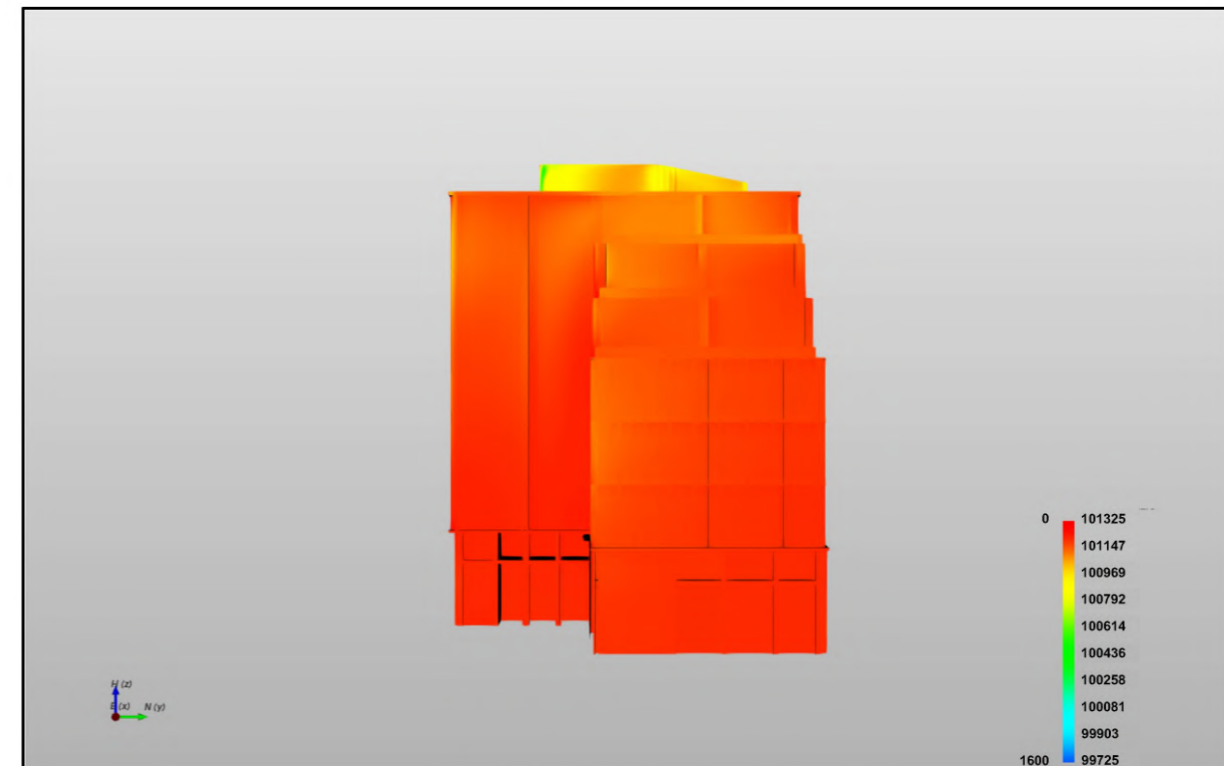
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PROSPETTO OVEST

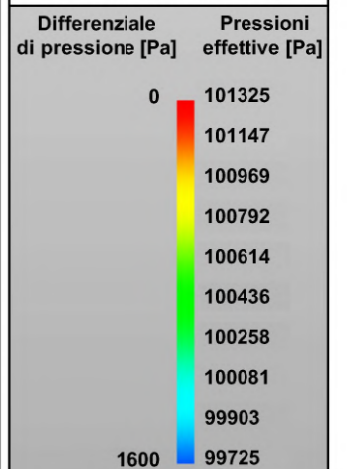


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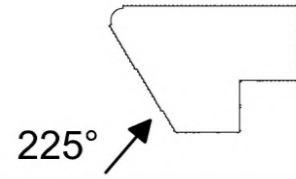
PROSPETTO EST

LEGENDA



CASO 6: VENTO 225°

PRESSIONI ESTERNE POSITIVE [Pa]



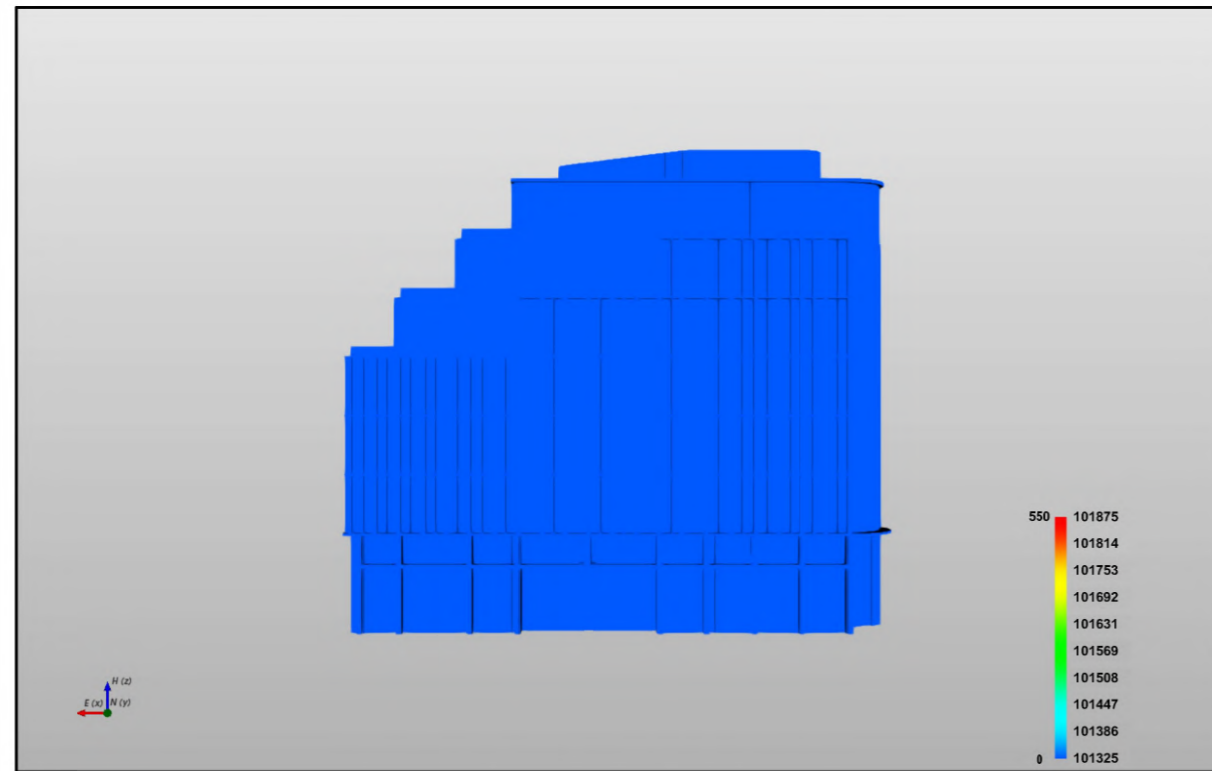
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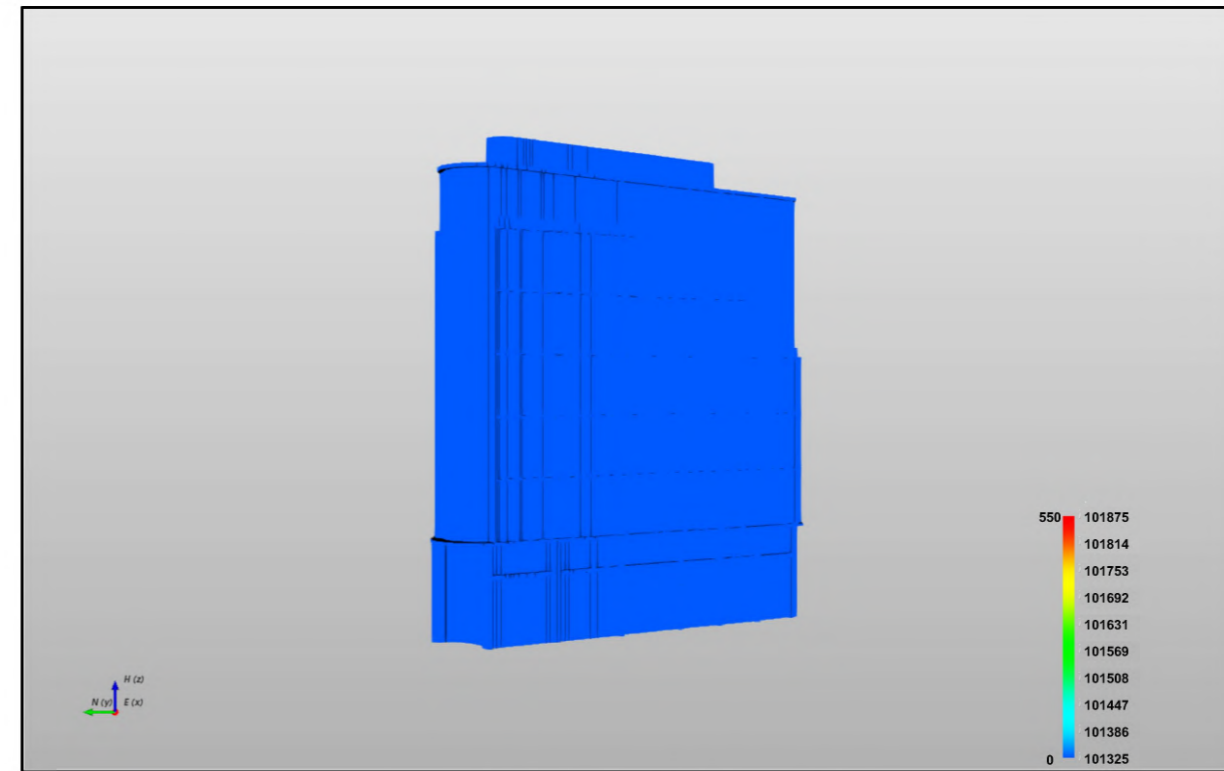
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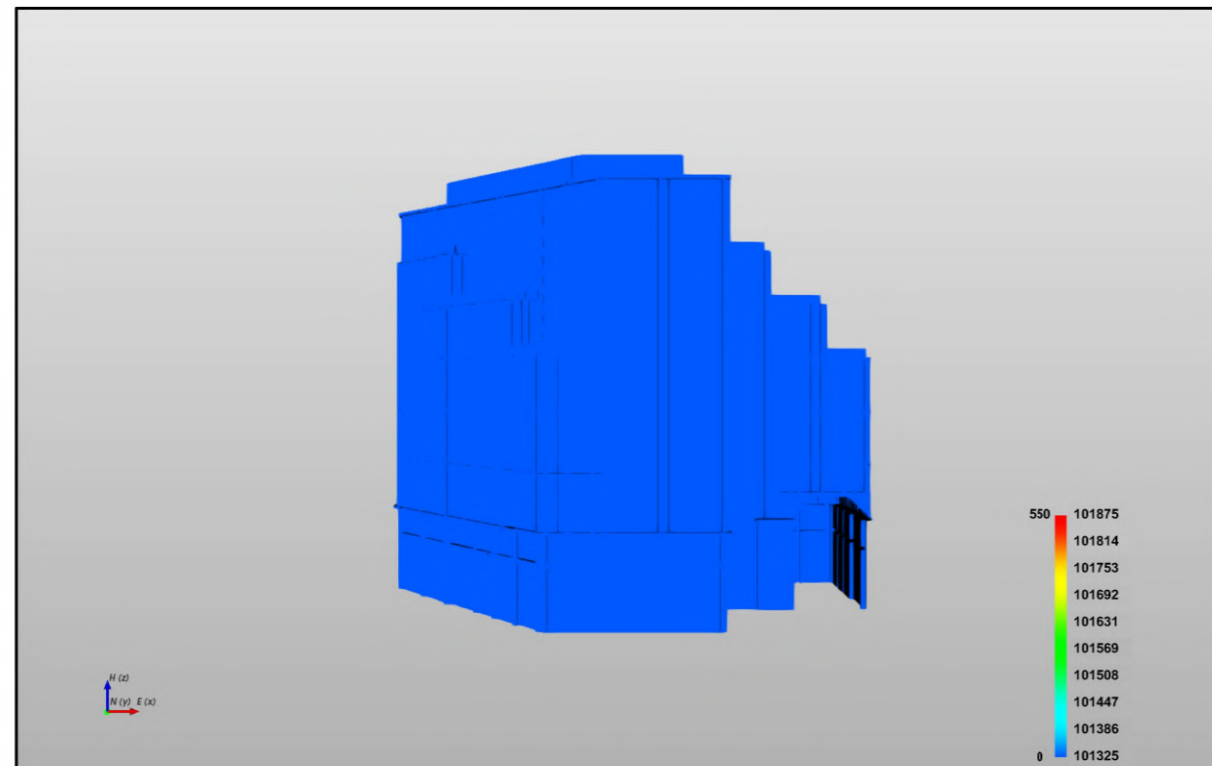
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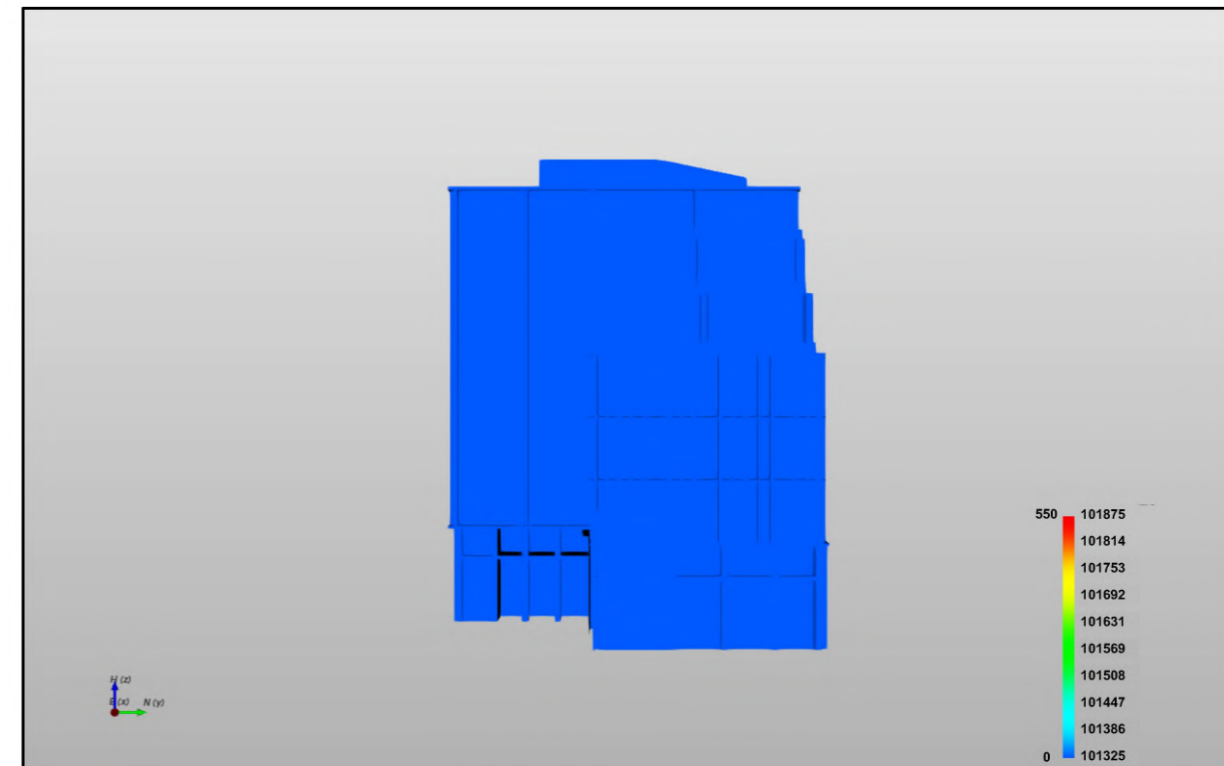
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PROSPETTO OVEST

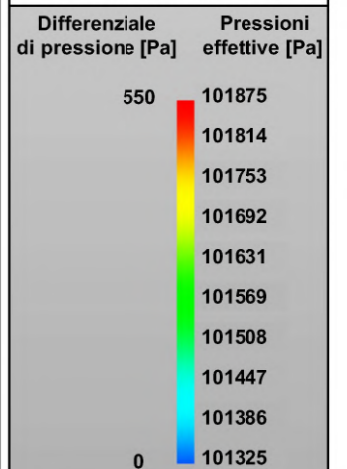


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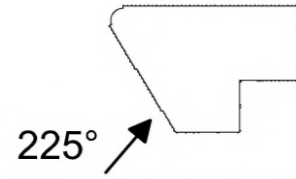
PROSPETTO EST

LEGENDA



CASO 6: VENTO 225°

PRESSIONI ESTERNE NEGATIVE [Pa]



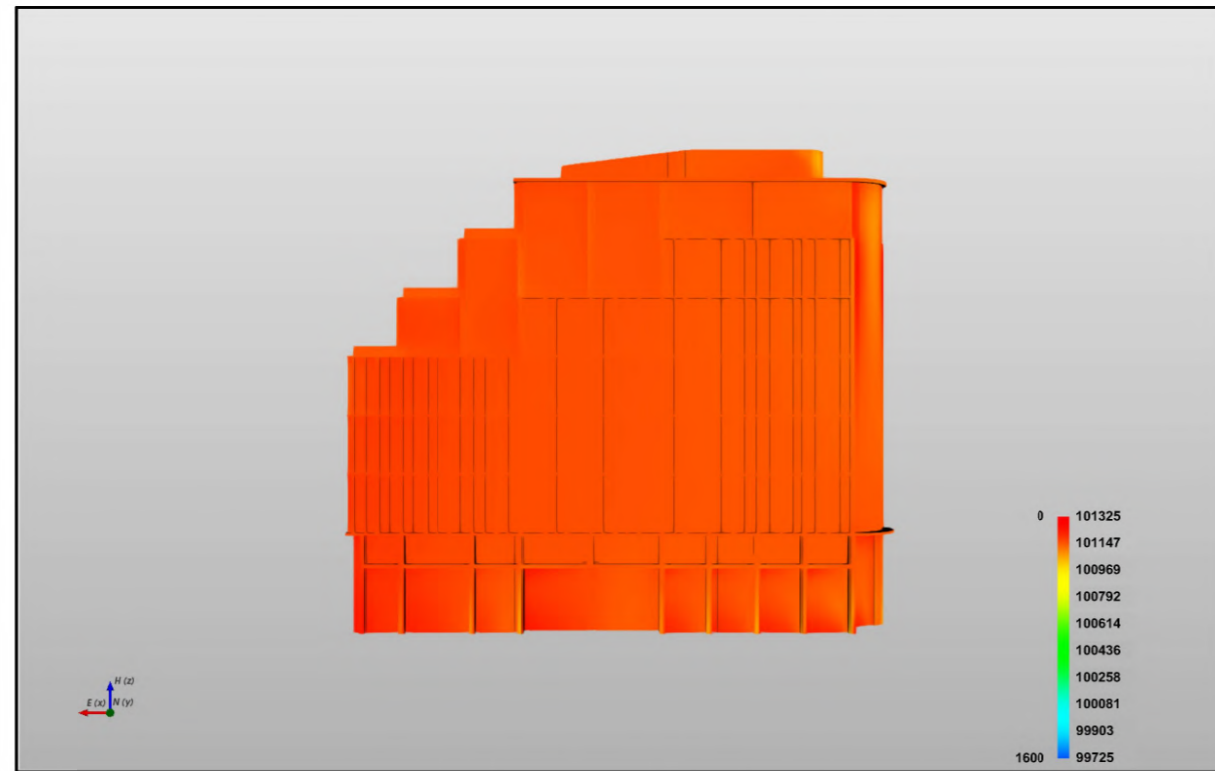
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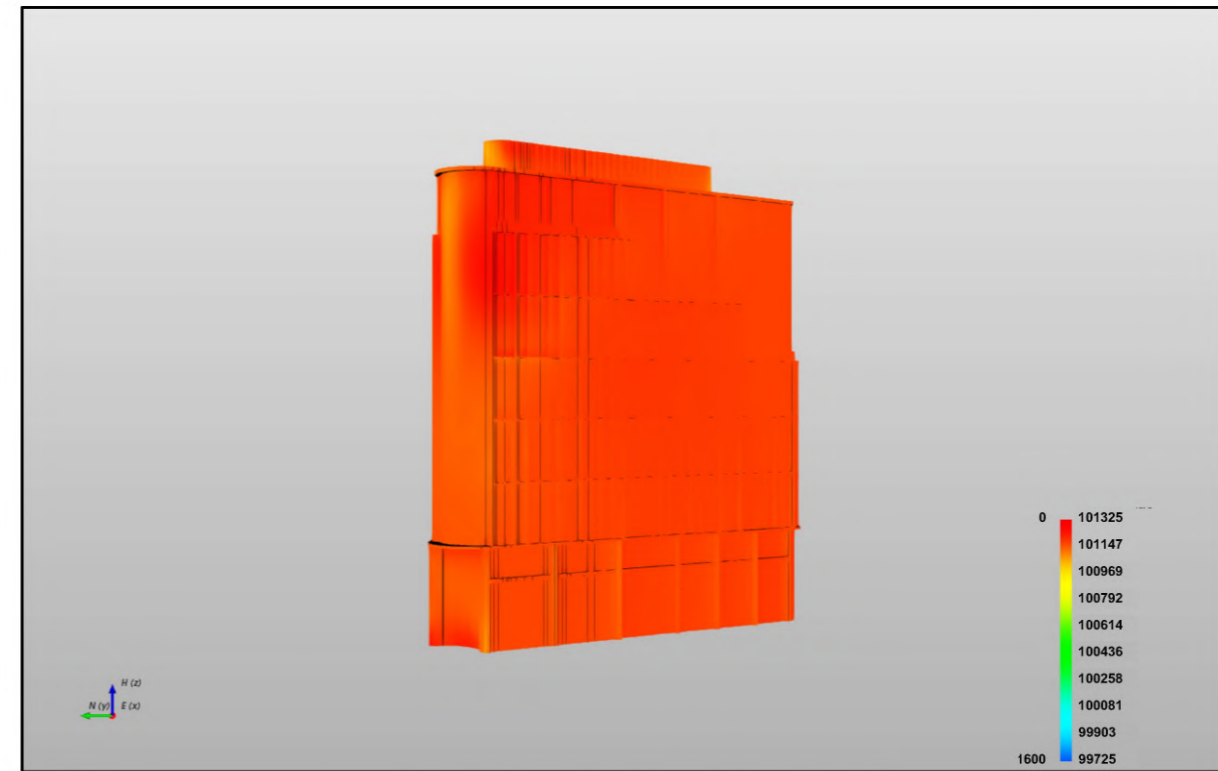
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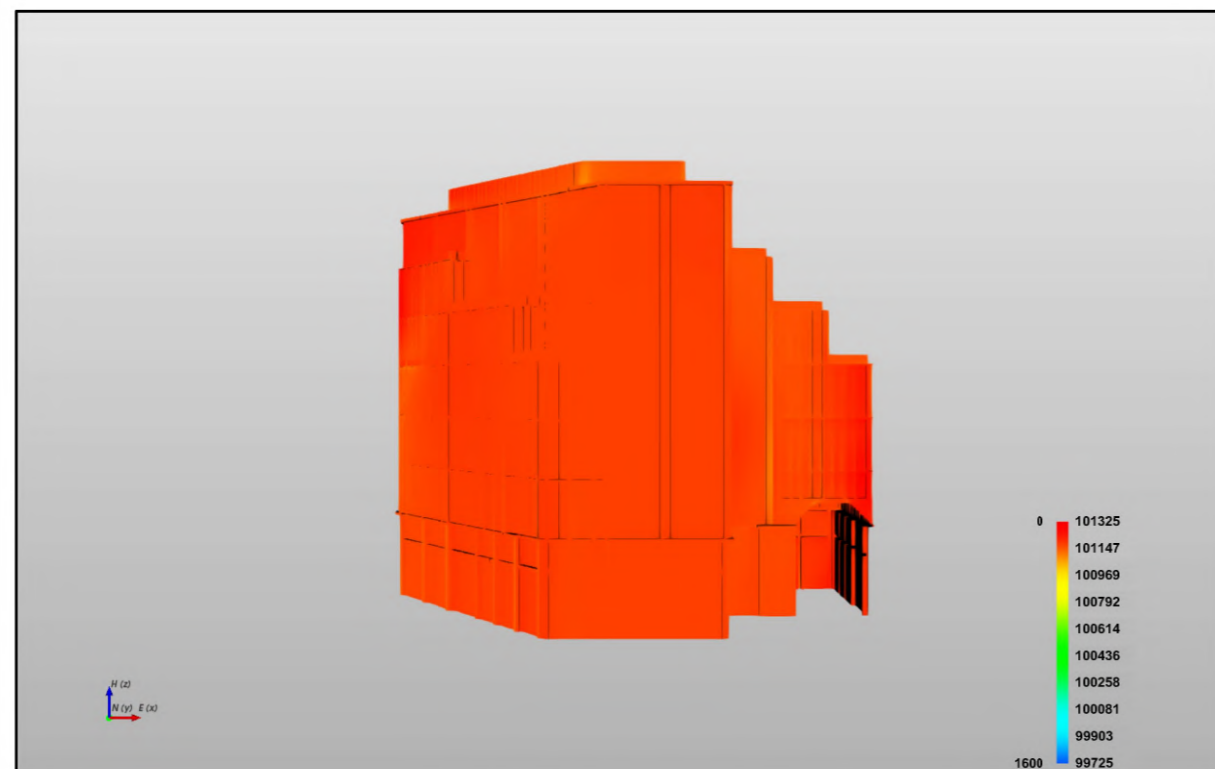
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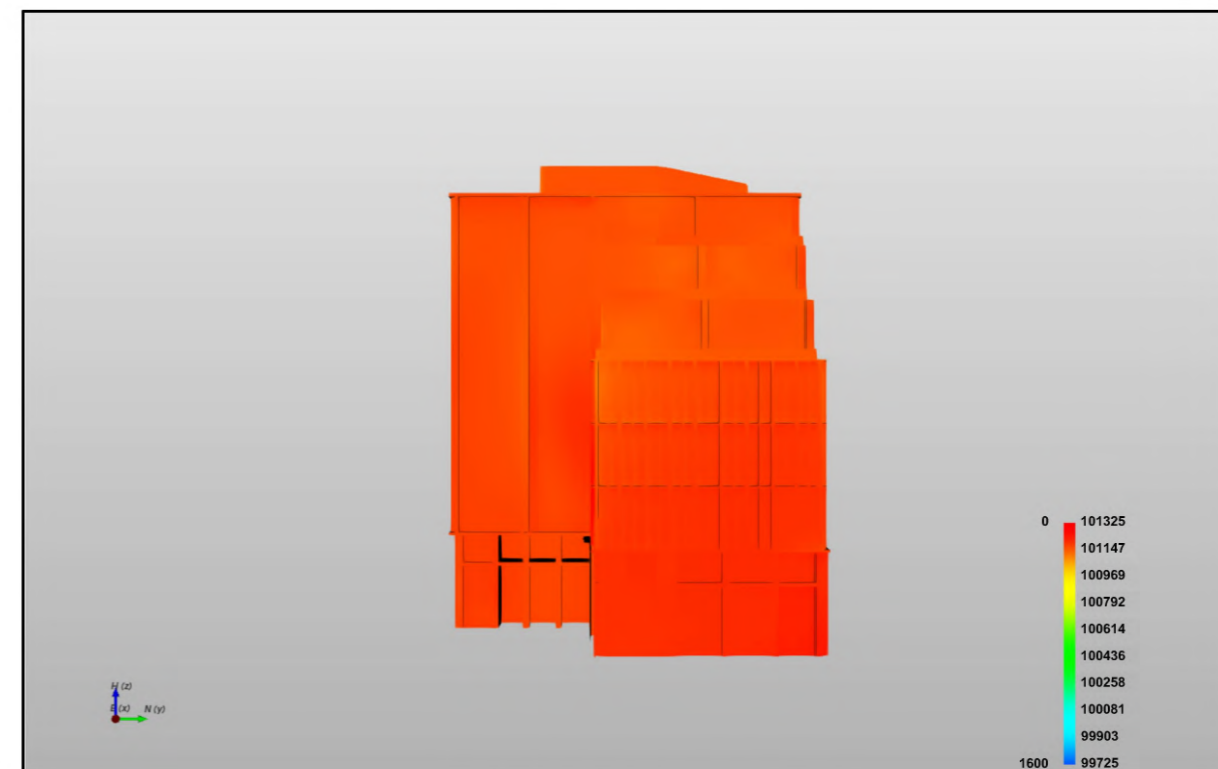
PROSPETTO NORD



PROSPETTO OVEST

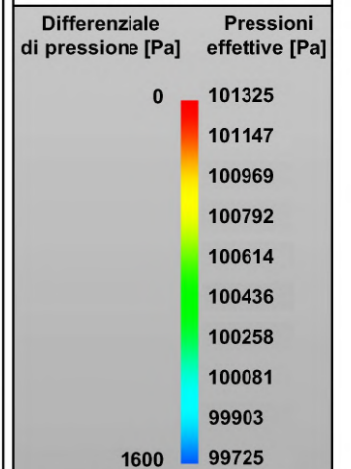


PROSPETTO SUD



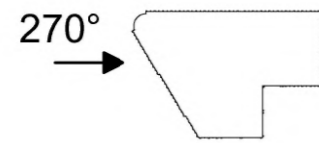
PROSPETTO EST

LEGENDA



CASO 7: VENTO 270°

PRESSIONI ESTERNE POSITIVE [Pa]



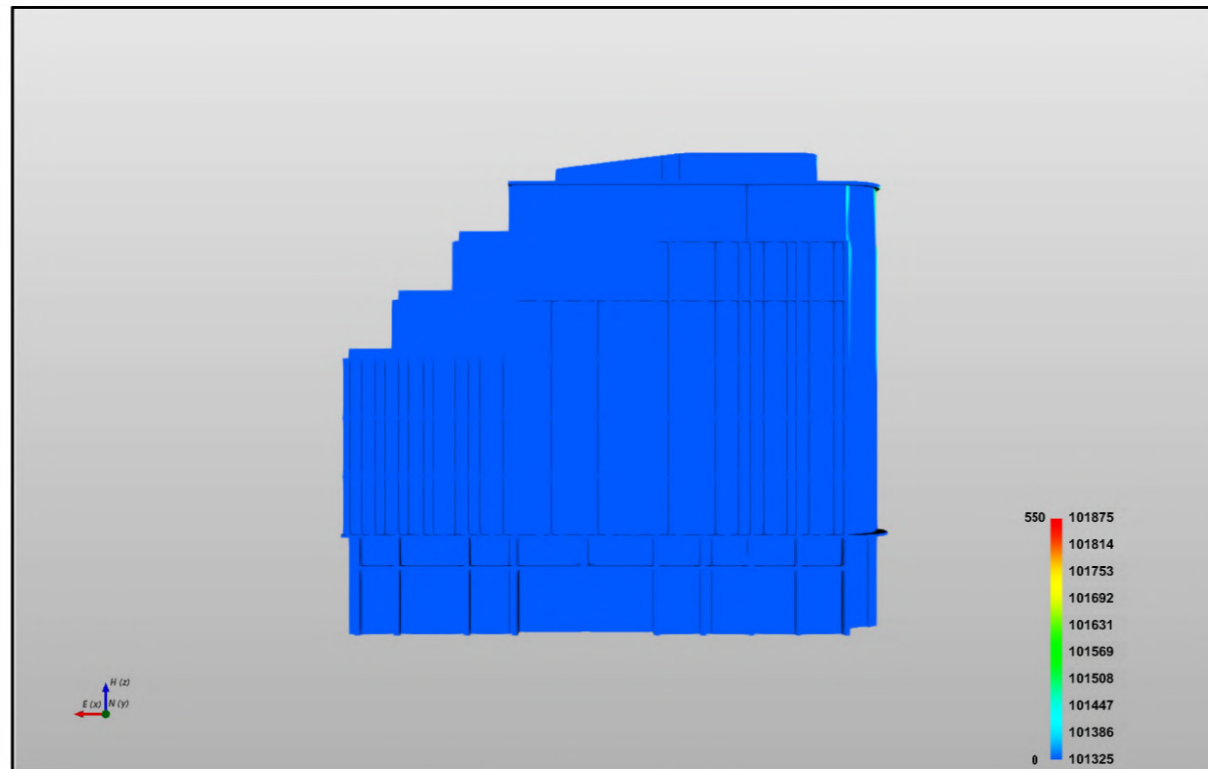
TESI in PROGETTI DI STRUTTURE M

**AZIONE DEL VENTO SU FACCIATE CONTINUE DI EDIFICI A TORRE:
APPROCCIO NORMATIVO, ANALISI IN GALLERIA DEL VENTO E
MODELLAZIONE CFD**

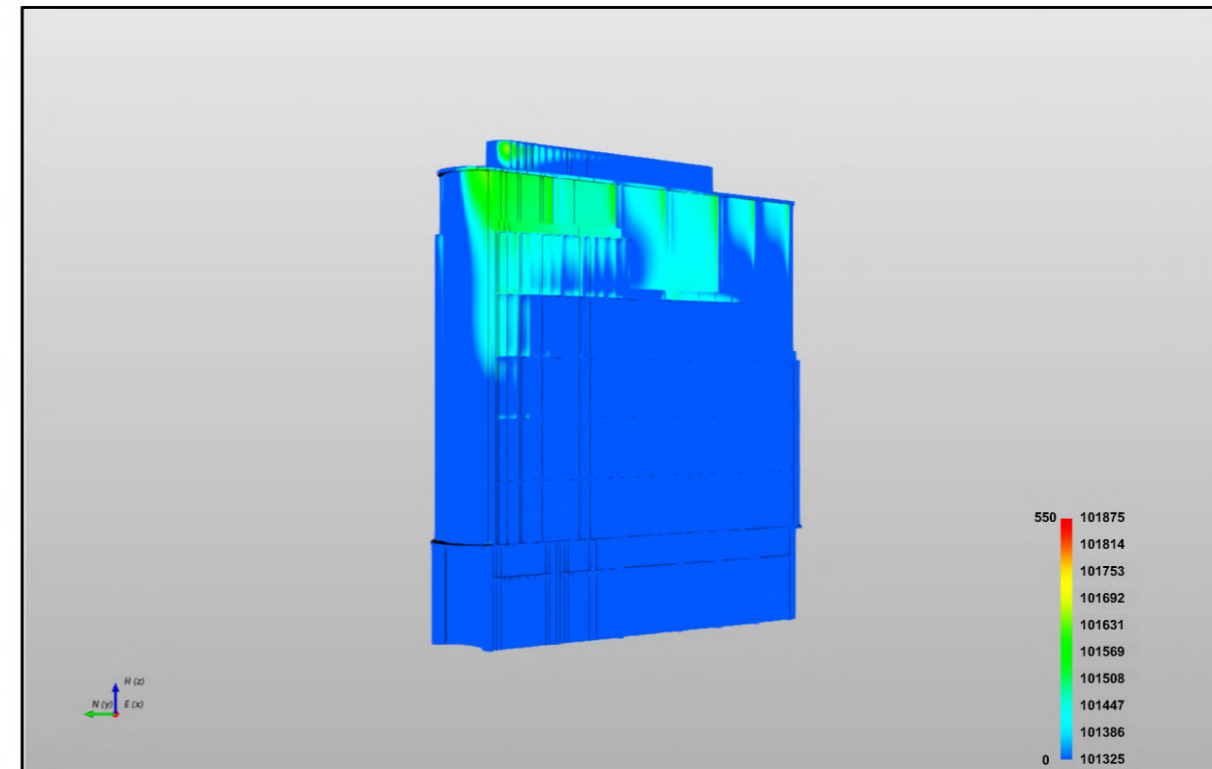
RISULTATI ANALISI CFD

ALLEGATO

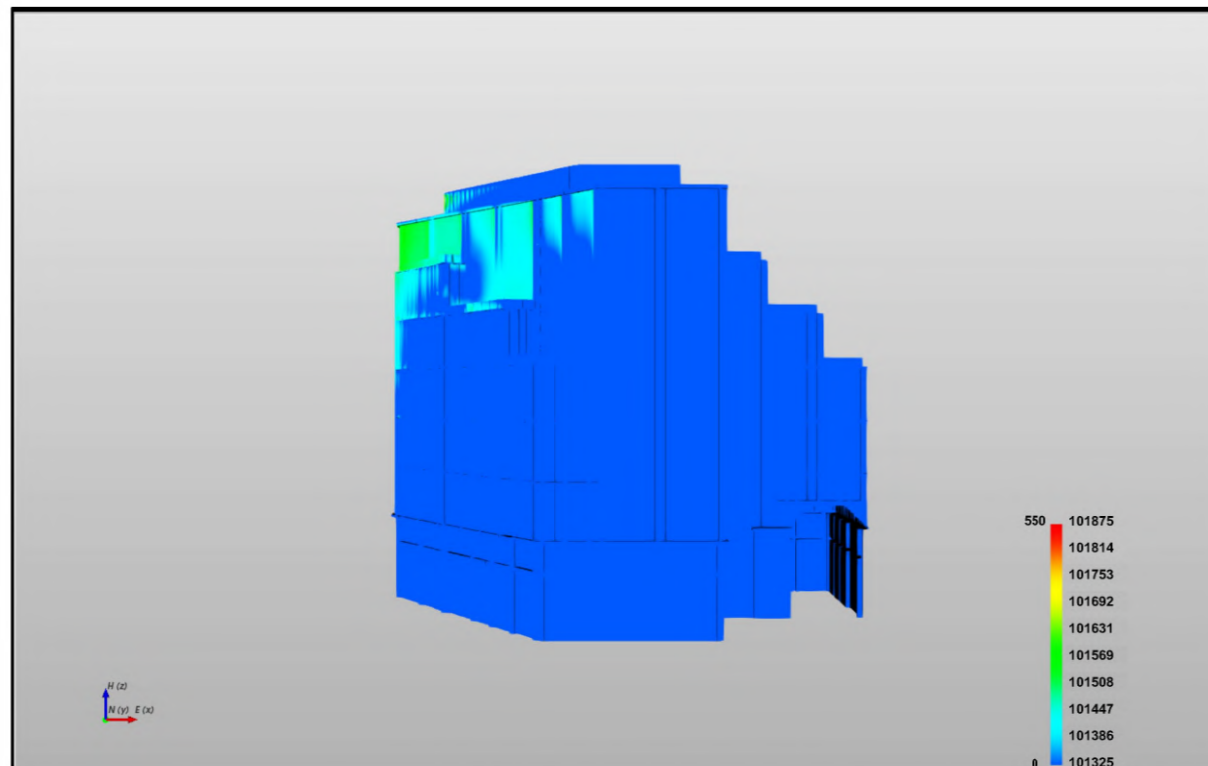
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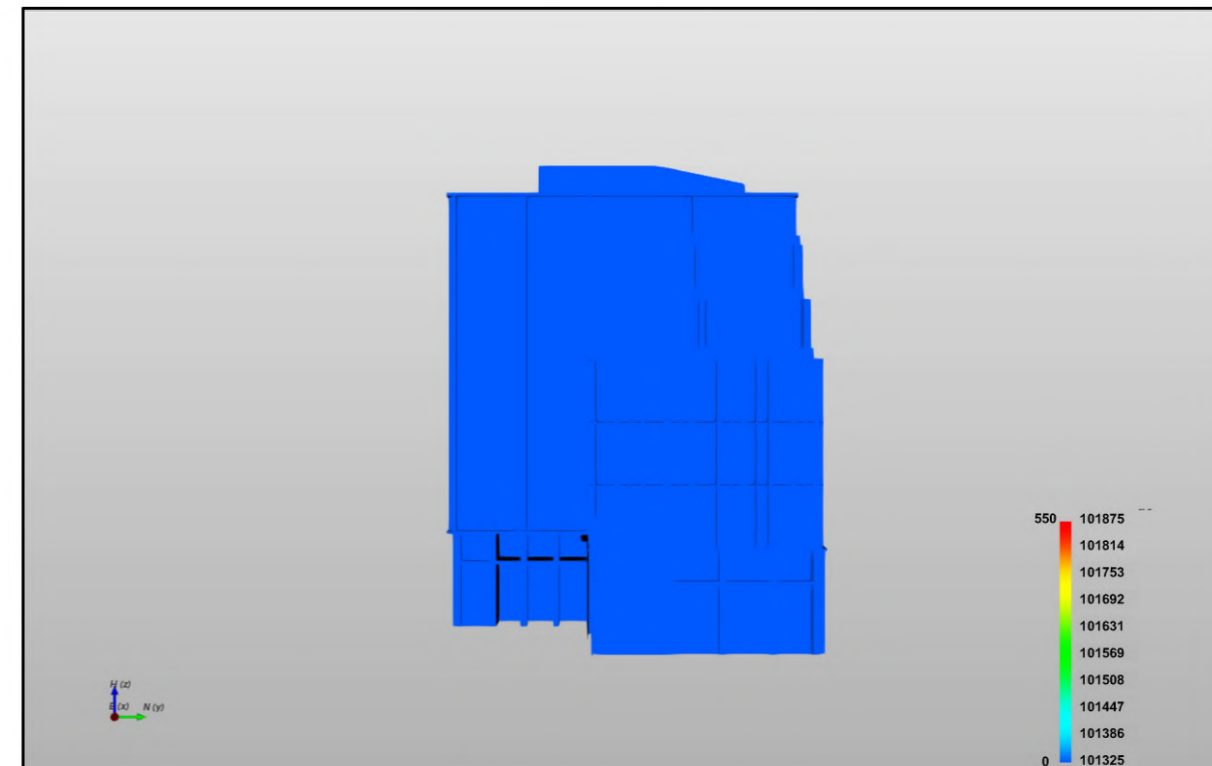
PROSPETTO NORD



PROSPETTO OVEST

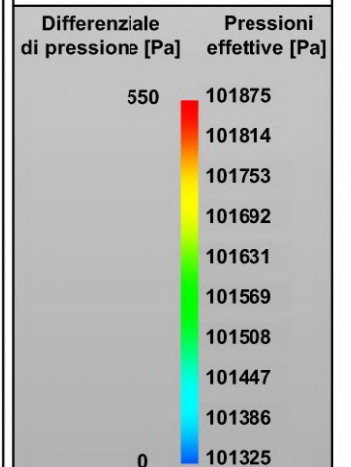


PROSPETTO SUD



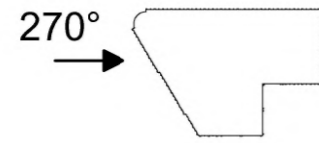
PROSPETTO EST

LEGENDA



CASO 7: VENTO 270°

PRESSIONI ESTERNE NEGATIVE [Pa]



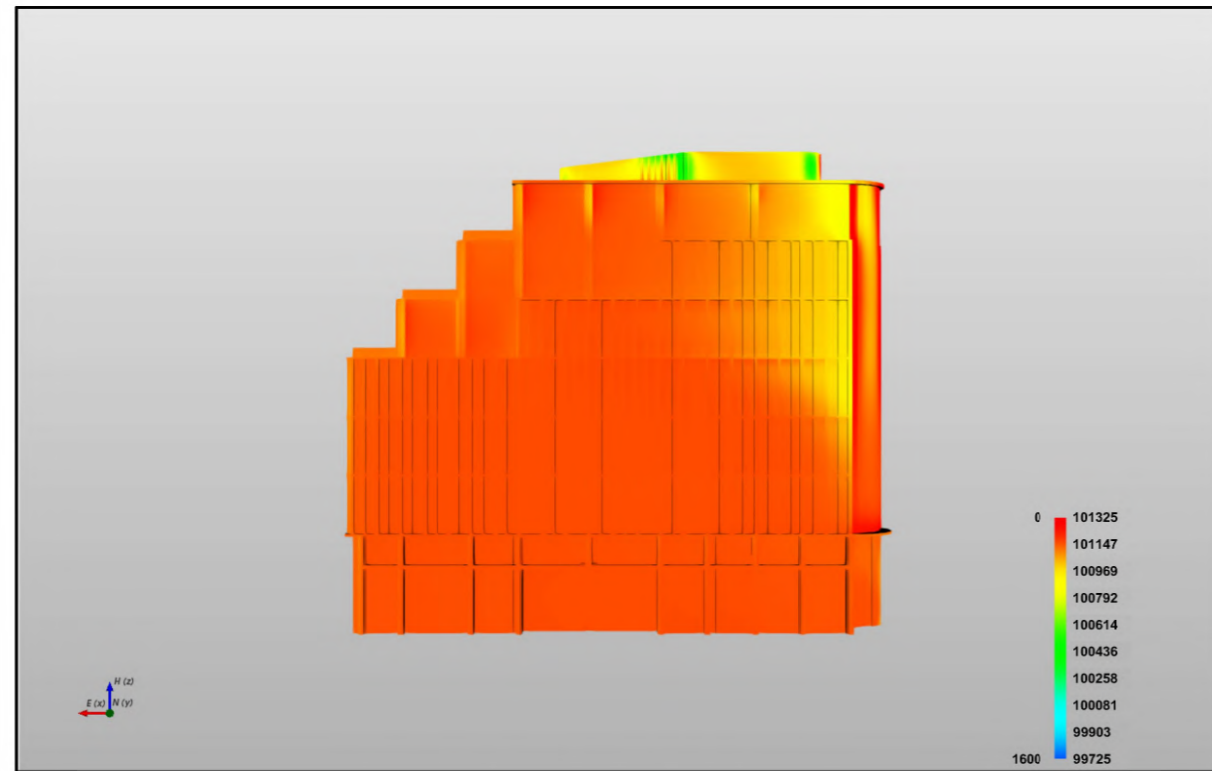
TESI in PROGETTI DI STRUTTURE M

AZIONE DEL VENTO SU FACCIATE CONTINUE DI EDIFICI A TORRE:
APPROCCIO NORMATIVO, ANALISI IN GALLERIA DEL VENTO E
MODELLAZIONE CFD

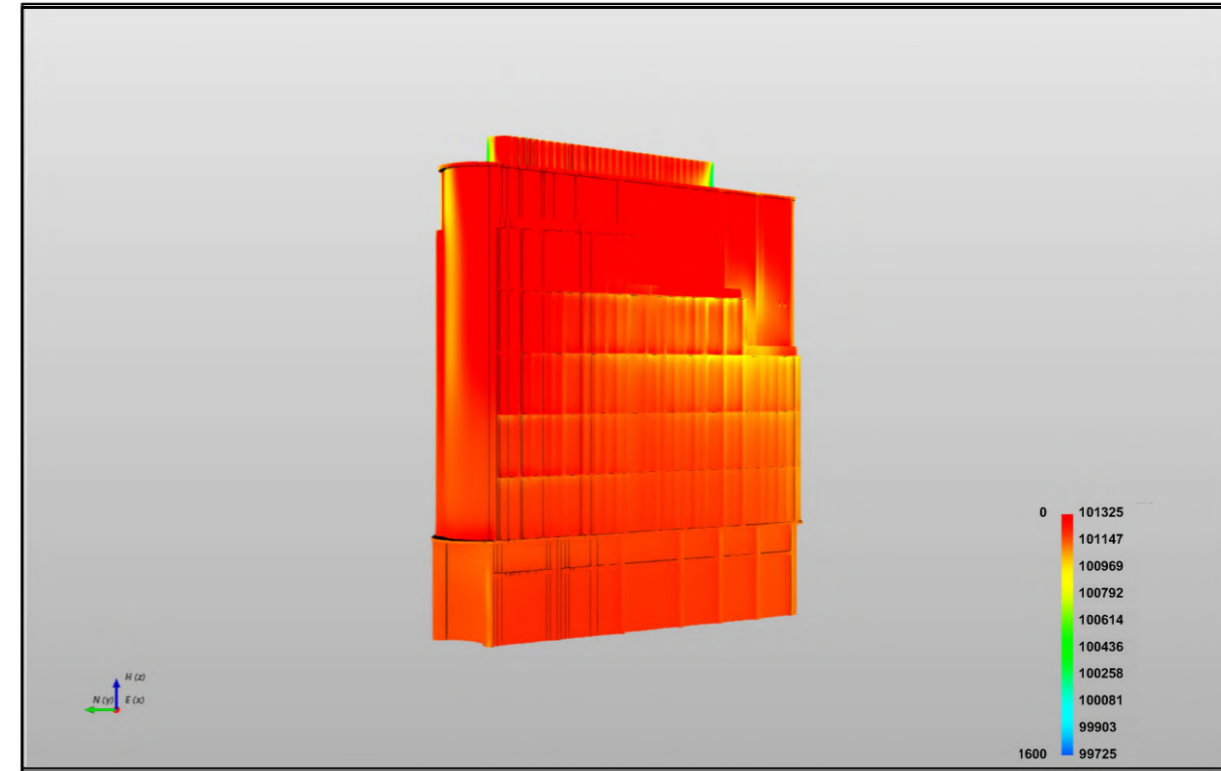
RISULTATI ANALISI CFD

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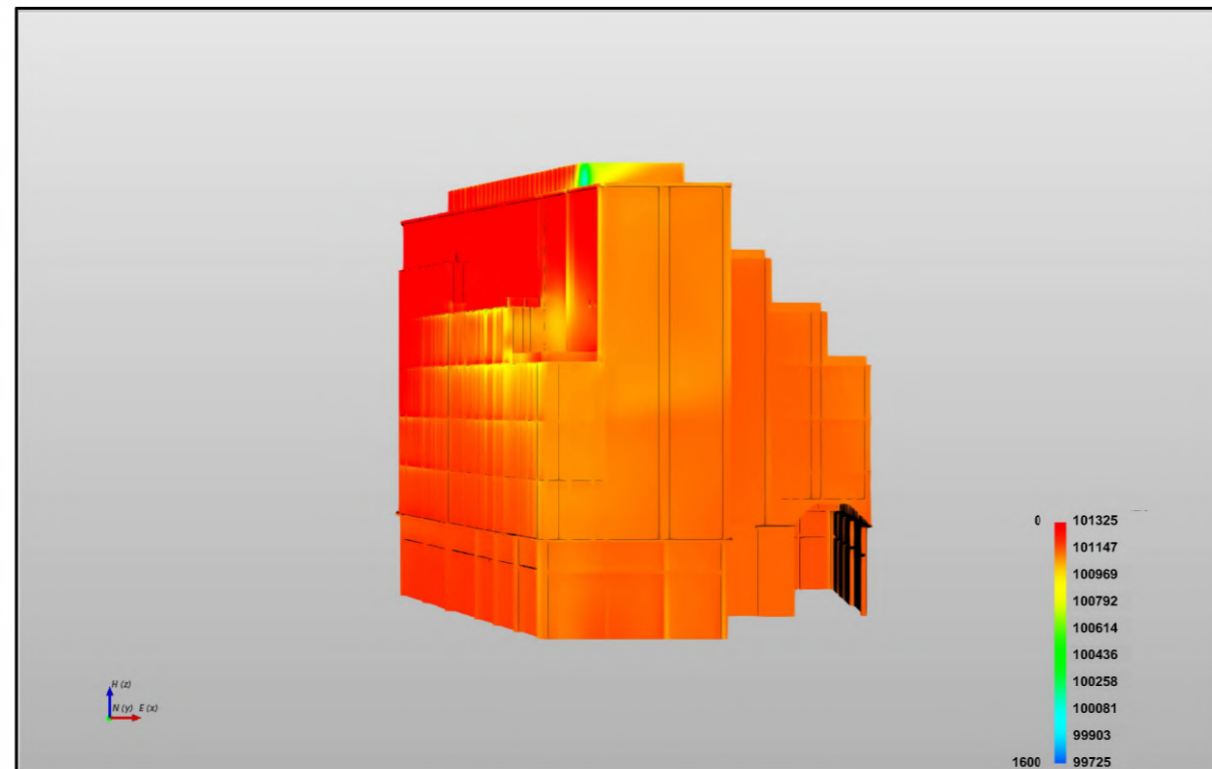
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PROSPETTO NORD



PROSPETTO OVEST

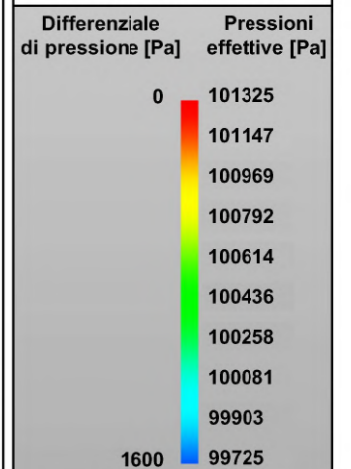


PROSPETTO SUD



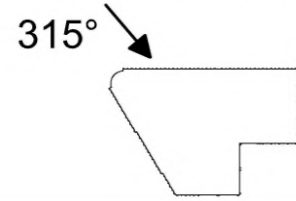
PROSPETTO EST

LEGENDA



CASO 8: VENTO 315°

PRESSIONI ESTERNE POSITIVE [Pa]



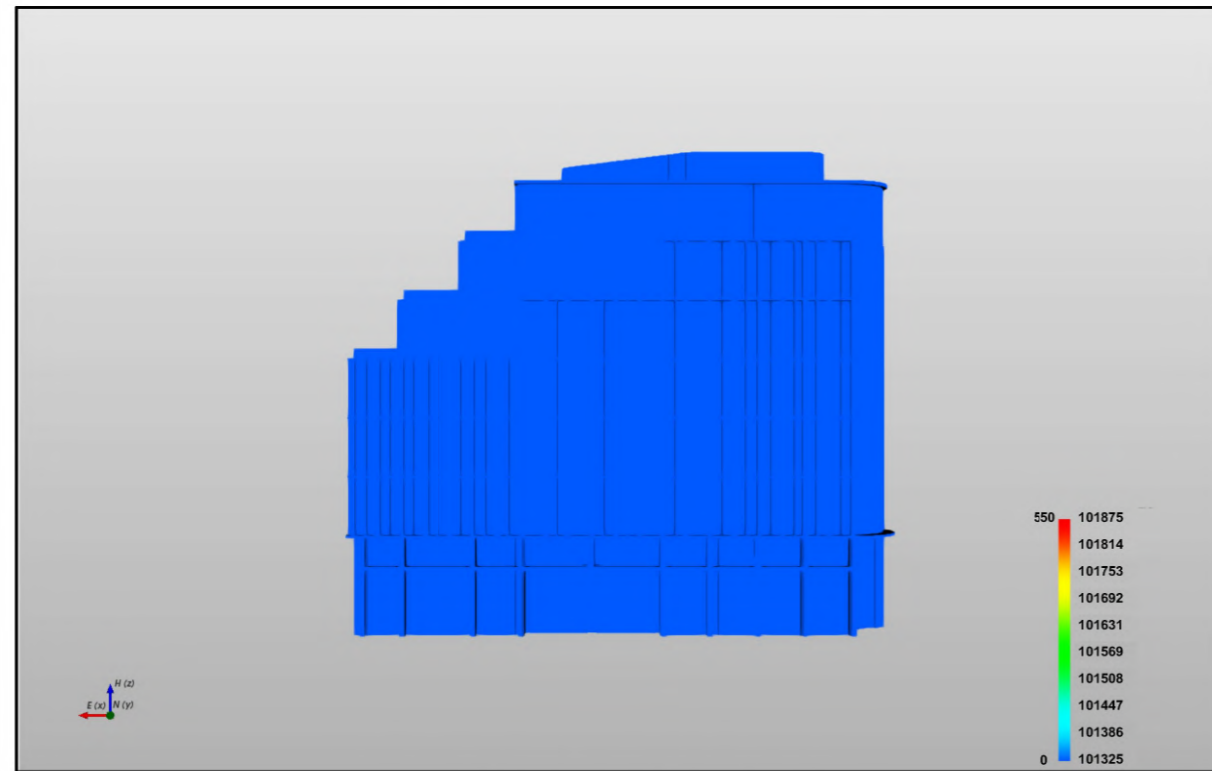
TESI in PROGETTI DI STRUTTURE M

AZIONE DEL VENTO SU FACCIATE CONTINUE DI EDIFICI A TORRE:
APPROCCIO NORMATIVO, ANALISI IN GALLERIA DEL VENTO E
MODELLAZIONE CFD

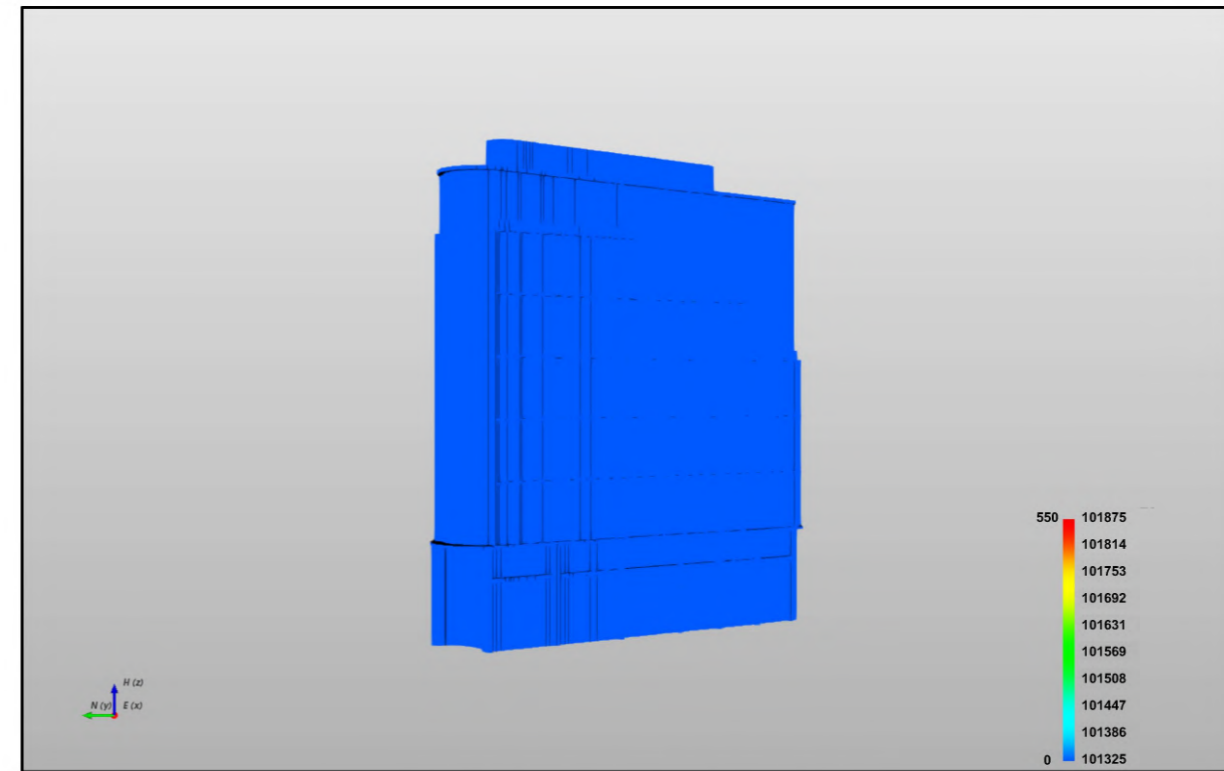
RISULTATI ANALISI CFD

ALLEGATO

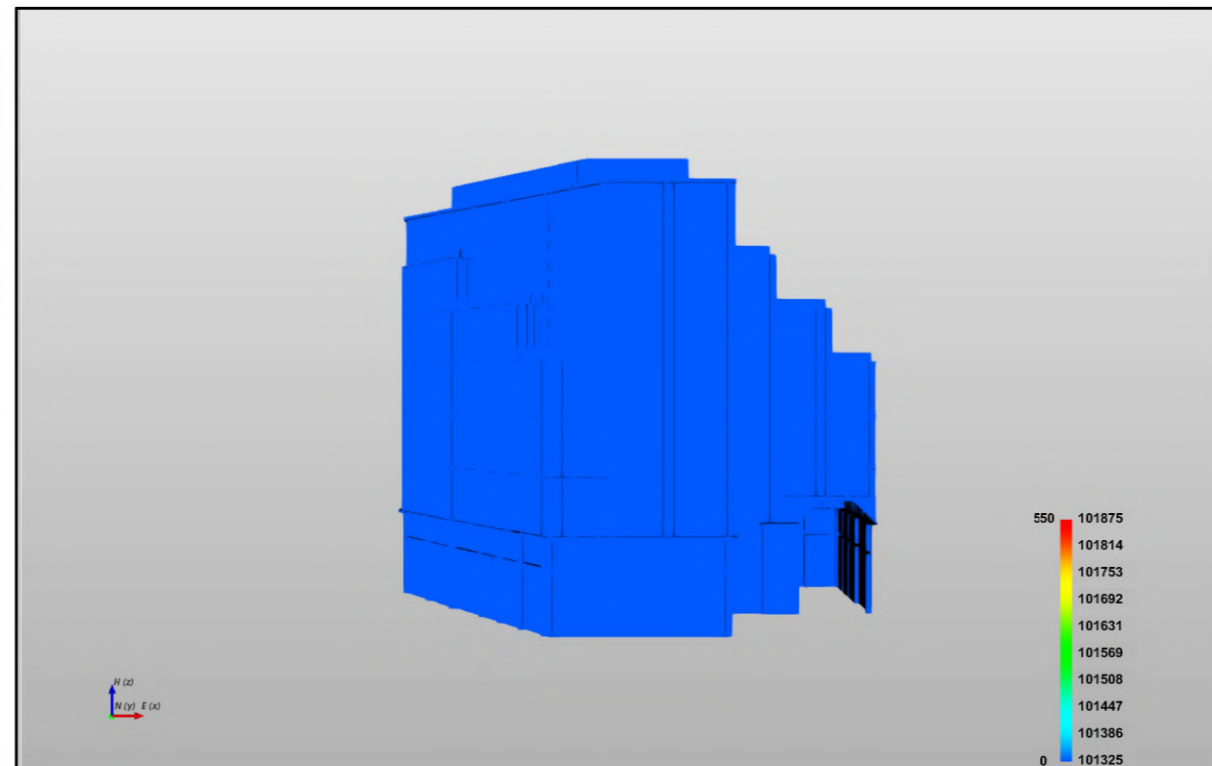
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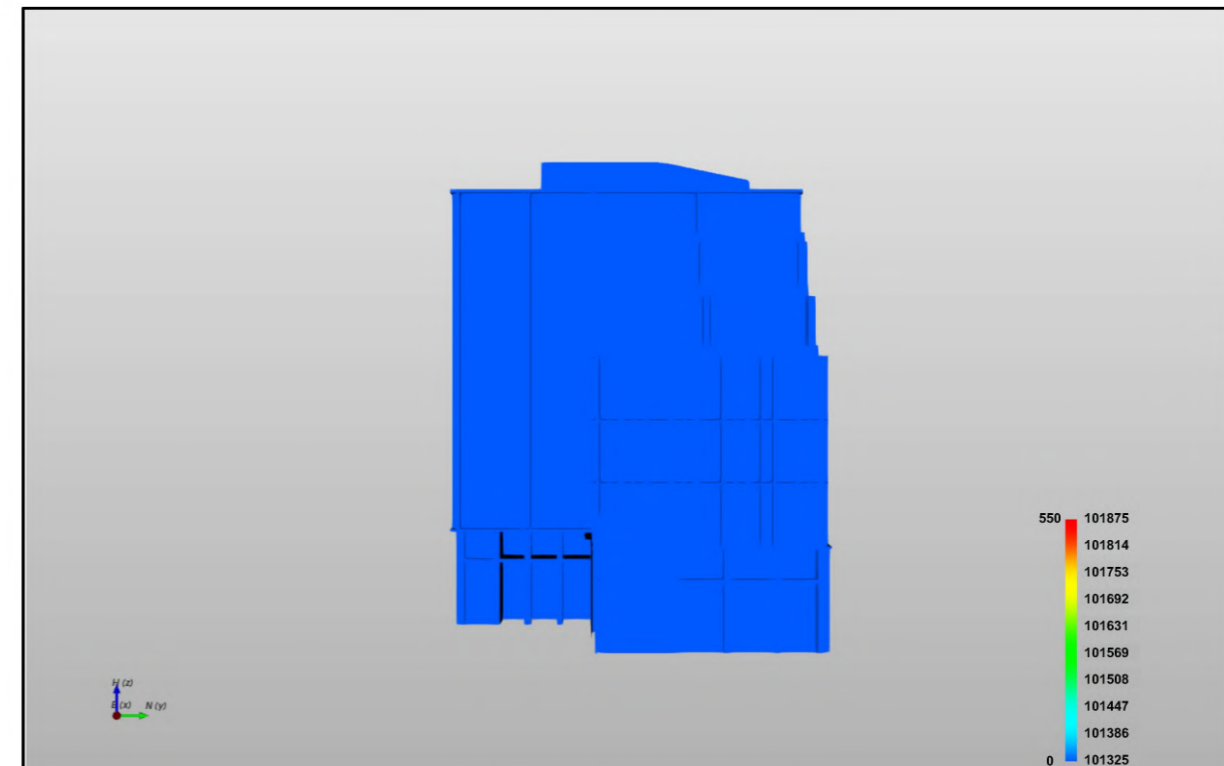
PROSPETTO NORD



PROSPETTO OVEST

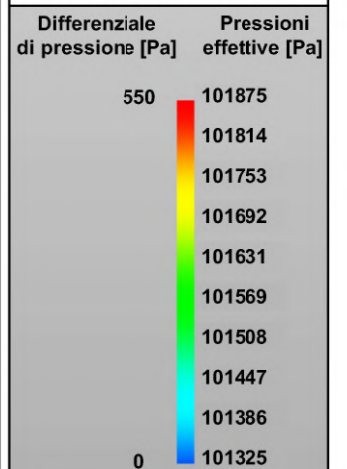


PROSPETTO SUD



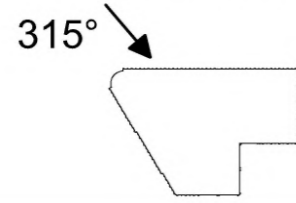
PROSPETTO EST

LEGENDA



CASO 8: VENTO 315°

PRESSIONI ESTERNE NEGATIVE [Pa]



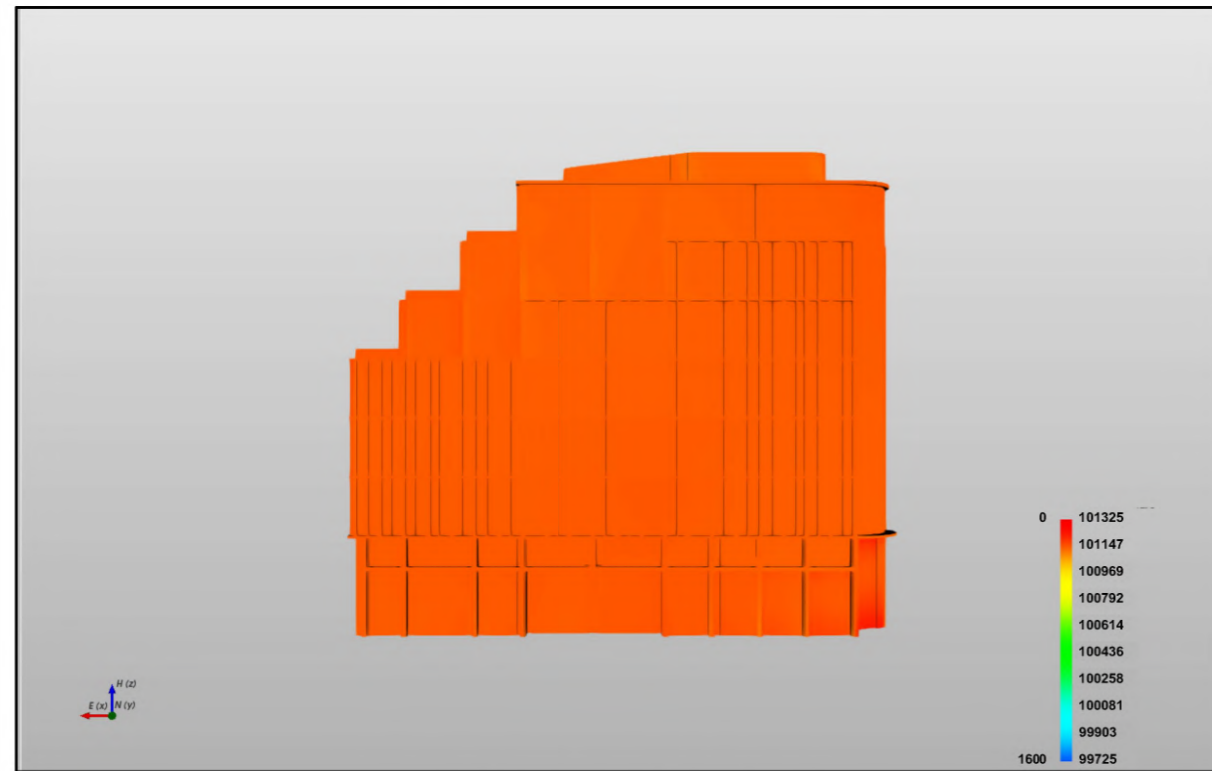
TESI in PROGETTI DI STRUTTURE M

AZIONE DEL VENTO SU FACCIATE CONTINUE DI EDIFICI A TORRE:
APPROCCIO NORMATIVO, ANALISI IN GALLERIA DEL VENTO E
MODELLAZIONE CFD

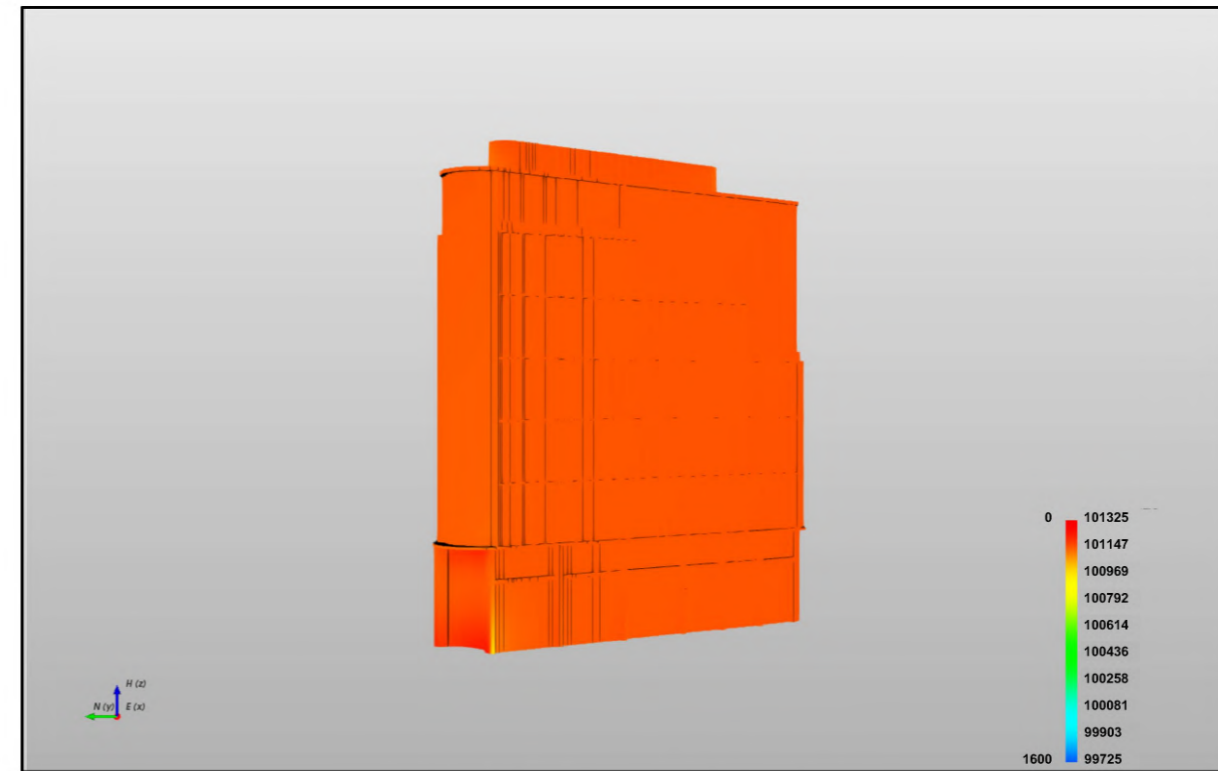
RISULTATI ANALISI CFD

ALLEGATO

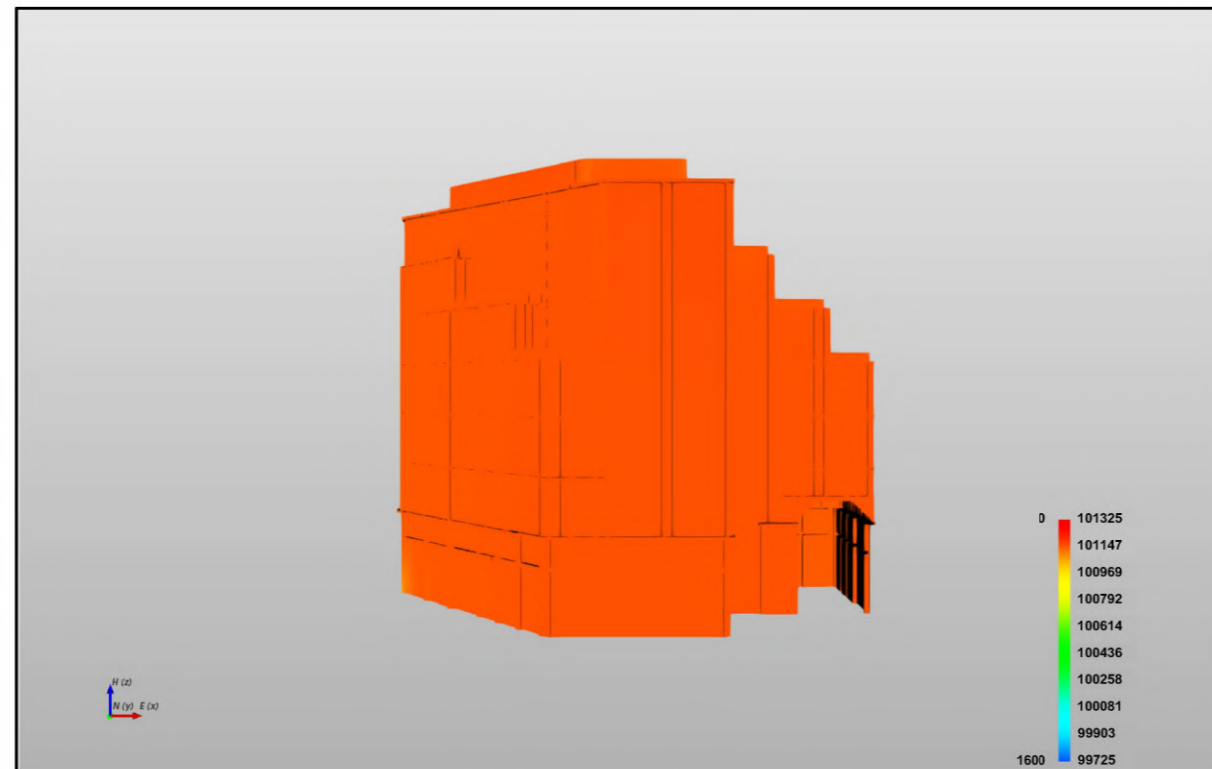
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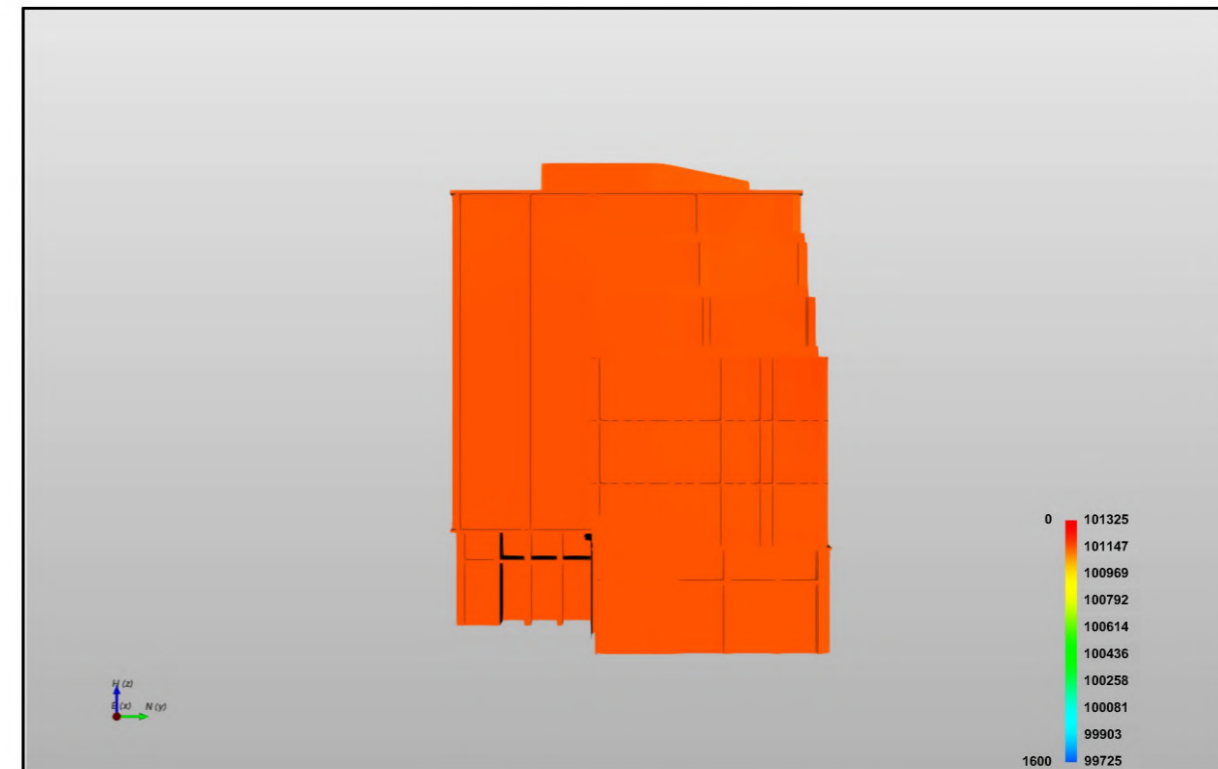
PROSPETTO NORD



PROSPETTO OVEST



PROSPETTO SUD



PROSPETTO EST

LEGENDA

