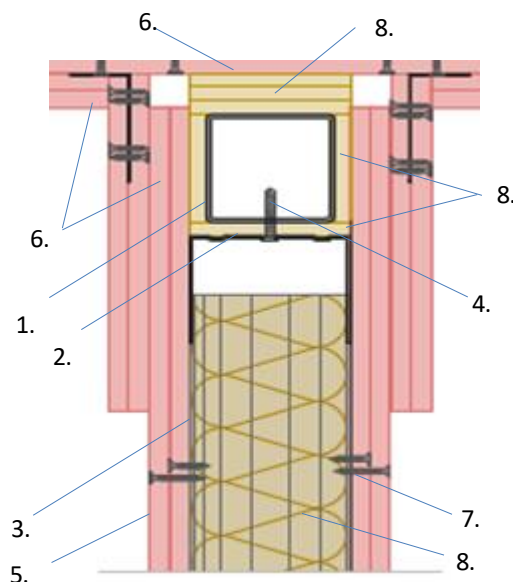




Racordul peretilor usori nestructurali (CNS) la partea superioara, cu margine libera, prin elemente de rezistenta secundare (tip profile metalice)



Exemplu

RACORD LINIAR la partea superioara a peretelui usor din gips carton cu PROFIL RECTANGULAR METALIC DE REZISTENTA

1. Profil metalic rectangular - latime $b = 80\text{mm} \dots 100\text{mm}$; grosime $t = \text{minim } 4\text{mm}$
2. Profil metalic Rigiprofil (sau Rigips) tip UW 100- 0,6mm grosime (cu/fara aripa inalta)
3. Profil metalic Rigiprofil (sau Rigips) tip CW 100- 0,6mm grosime
4. Șurub autoperforant pentru oțel $\varnothing 6,3 \text{ mm}$; $L = 38 \text{ mm}$ sau similar, cf proiect (pentru fixarea profilului UW în profilul din oțel cu secțiune rectangulară $80 \times 80 - 4 \text{ mm}$)
5. Placi de gips carton Rigips (cf. Fisei Tehnice a sistemului de perete)
6. Placi de gips carton Rigips - fasii de protectie laterala sau orizontala, dupa caz (cf. Fisei Tehnice a sistemului de perete si/sau imbinare liniara cu rezistenta la foc)
7. Suruburi autofiletante Rigips pentru fixarea placilor de gips carton ale peretelui
8. Vata minerala, dupa caz (cf. Fisei Tehnice a sistemului de perete si/sau imbinare liniara cu rezistenta la foc)

Specificatia Tehnica prezinta exemple de predimensionare a elementelor de structura secundara - tip profile metalice - de sectiune rectangulara, utilizate la prinderea peretilor de gips-carton (CNS) la partea superioara, pentru diverse deschideri intre stalpii de rezistenta ai structurii si pentru diverse inaltime de pereti usori, supusi solicitarilor de rezistenta conform reglementarilor tehnice in vigoare (la data prezentei editii 8.00.03 ST), in principal din actiuni seismice si vant.

Specificatie Tehnica prezenta se adreseaza situatiilor ce nu permit fixarea la partea superioara a peretilor usori de gips carton Rigips in elemente masive de rezistenta principale (grinzi, plansee), inclusiv pentru imbinarile liniare rezistente la foc ale peretilor Rigips cu acoperisuri de tabla metalica cu profil trapezoidal. (fise tehnice coduri L.J.).

NOTA: Specificatia este prezentata cu titlu orientativ, consultativ, in ajutorul proiectantilor de specialitate si nu constituie / nu substituie, partial sau integral, proiectul tehnic al unei lucrari, ce trebuie intocmit de catre factorii autorizati, conform legislatiei in vigoare.

RACORDUL LINIAR SUPERIOR AL PERETILOR DE GIPS CARTON, CU PROFILE METALICE DE REZISTENTA, LA STALPI, GRINZI sau PANE DE ACOPERIS

Inaltime pereti de gips carton:

intre 4,00 m si 12,00 m

Distante interax stalpi/grinzi/pane acoperis:

intre 4,00m si 10,0 m

Greutate pereti:

**cu panotaj 2x (2x 12,5mm)
cca. 50 kg/m²**

**cu panotaj 2x (3x 12,5mm)
cca. 75 kg/m²**

Profil metalic rectangular de rezistenta-racord:

- latime $b = 80\text{mm} \dots 100\text{mm}$
- gros $t = \text{min. } 4\text{mm}$

DATE DE AMPLASAMENT

cf. Normativ P100-1:2013 - Cod de proiectare seismică

Zona amplasament construcție evaluată	Acceleratia terenului pentru proiectare a_g (m/s ²)	Perioada de colt T_c (s)
Focsani, jud Vrancea	0,40 g	1,6 s
Bucuresti	0,30 g	1,6 s
Cluj-Napoca, jud. Cluj	0,10 g	0,7 s

CONCEPTIA ELEMENTELOR DE STRUCTURA SECUNDARA

Componentele nestructurale (CNS) - peretii de gips-carton usori - se dimensioneaza si se verifica, la urmatoarele stari limita de calcul, dupa caz:

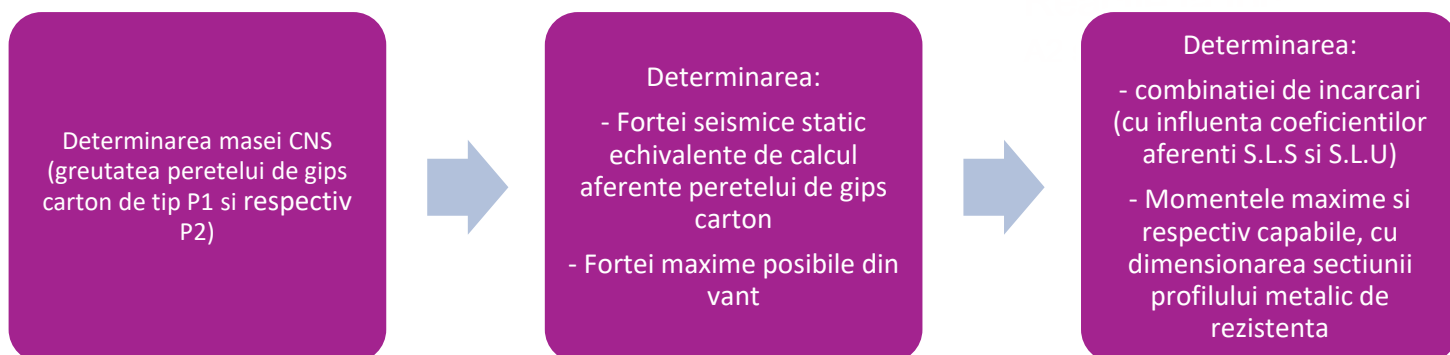
A. S.L.U. (starea limita ultima) - cerinta fundamentala de siguranta/protectie a vietii
Ipoteza de evaluare tehnica: peretii de gips carton pot suferi degradari majore, necontrolate (fisuri mari, crapaturi, deformatii semnificative, cedari locale etc), inasa fara prabusire (colaps), in situatiile peretilor ce pot prezenta risc pentru viata si integritatea corporala a oamenilor.

Nota: In cazul unui eveniment seismic major, atingerea sau/si chiar depasirea starii limite ultime SLU presupune ca din acel moment, cladirea poate deveni inutilizabila si nu mai este garantata siguranta/protecia vietii, in absenta realizarii unei expertize tehnice de evaluare a starii acestora si luarea de masuri de remediere/consolidare.

B. S.L.S. (starea limita de serviciu) - cerinta fundamentala de limitare a degradarilor
Ipoteza de evaluare tehnica: peretii de gips carton vor suferi degradari minore sau medii (fisuri, deformatii remanente, etc), dar fara scoaterea din functiune a acestora, iar costurile de remediere sa nu fie exagerat de mari in comparatie cu refacerea lucrarilor/ costul investitiei

IPOTEZE DE CALCUL

- Actiunea seismică corespunde unui interval mediu de recurenta $IMR = 225$ ani (cu probabilitate de depasire de 20% in 50 de ani), cf normativ P100-1:2013
- Actiunea din vant corespunde unui interval mediu de recurenta de 50 de ani (probabilitate de depasire de 2% intr-un an), cf. codului de proiectare CR 1-1-4:2012)



BREVIAR DE CALCUL INFORMATIV (cu titlu orientativ, consultativ)

Ipoteza de calcul rezultata pentru dimensionarea profilelor metalice secundare de rezistenta

S.L.U. (starea limita utima)
Actiunea dominanta: seism

PRINDERI RECOMANDATE PENTRU PROFILUL METALIC RECTANGULAR DE REZISTENTA privind racordul superior al peretelui usor din gips carton la STALPI, GRINZI sau PANE DE ACOPERIS adiacente

- elemente metalice -> prindere bulonata
- elemente din beton armat pretensionat -> cu juguri
- elemente din beton armat (nepretensionat) -> cu ancore mecanice / chimice

EXEMPLE DE CALCUL

TIP PERETE: P1, P2 cu inaltime si deschidere maxima (Hmax= 12,00m; Lmax= 10,00m)



EXEMPLE PERETI

Tip perete	P1 Panotaj 2x (2x 12,5mm); UW/CW100	P2 Panotaj 2x (3x 12,5mm); UW/CW100
G/m²	50 kg/m²	75 kg/m²
Hmax	12,00 m	12,00 m
L	10,00 m	10,00 m
A	120 m²	120 m²
M _{perete}	6000 kg	9000 kg
G _{perete}	60 kN	90 kN

EXEMPLU DE CALCUL
Amplasament:
FOCSANI, Jud. VRANCEA

ACTIUNEA VANTULUI

$q_b = 0,6$ kPa (presiunea/ suctiunea vantului ce actioneaza pe suprafete rigide interioare ale cladirii/structurii)

$w_i = \gamma_{iw} \times c_{pi} \times q_p(z_i)$
unde:

$\gamma_{iw} = 1$ (factorul de importanta -expunere)

c_{pi} (pozitiv) = 0,2

c_{pi} (negativ) = - 0,3

(coeficientul aerodinamic de presiune/suctiune pentru suprafete interioare)

$q_p(z_i) = 2$ (valoarea de varf a presiunii dinamice a vantului la cota Z_i)

Z_i = inaltimea de referinta pentru presiunea interioara

$w_i = 0,24$ kPa

$w_i = - 0,36$ kPa

ACTIUNEA SEISMICA

$a_g = 0,4$ g

$T_c = 1,6$ s

Forta seismica statica echivalenta

$F_{CNS}(z) = (\gamma_{CNS} \times a_g \times \beta_{CNS} \times K_z) \times m_{CNS} / q_{CNS}$

unde:

$\gamma_{CNS} = 1$ (factorul de importanta al CNS)

$\beta_{CNS} = 1$ (factorul de amplificare dinamica al CNS)

$q_{CNS} = 2,5$ (factorul de comportare a CNS)

$a_g = 0,4$ g (acceleratia terenului pentru proiectare pe amplasamentul considerat)

m_{CNS} = masa maxima a CNS in exploatare

$K_z = z = (z_{sup} + z_{inf}) / 2$ (factorul de amplificare a acceleratiei terenului pe inaltimea constructiei)

Tip perete	Forta seismica static echivalenta aferenta peretelui F_{CNS}	
P1 (cca 50 kg/m ²) Panotaj 2x (2x 12,5mm); UW/CW100	57600 N	57,6 kN 2,88 kN/m
P2 (cca 75 kg/m ²) Panotaj 2x (3x 12,5mm); UW/CW100	86400 N	86,4 kN 4,32 kN/m

Combinatii de incarcari si Momentele maxime aferente acestora Perete tip P1 (50 kg/m2)		
SLU (vant) = 0,54 kN/m2	F = 0,027 kN/m	Mef = 0,3375 kNm
SLU (seism)= 88,8 kN/m2	F = 4,44 kN/m	Mef = 55,5 kNm
SLS (vant) = 0,36 kN/m2	F = 0,018 kN/m	Mef = 0,225 kNm
SLS (seism) = 77,28 kN/m2	F = 3,864 kN/m	Mef = 48,3 kNm
$M_{max} = 55,5 \text{ kNm}$		
$W_{nec} = 236,1702 \text{ cm}^3$		
Profil rectangular 150mm x 100mm -10mm		
$W_{el} = 123 \text{ cm}^3$ $F_y = 235 \text{ N/mm}^2$	2 buc	$M_{RD} = 57,81 \text{ kNm} > M_{max}$

Combinatii de incarcari si Momentele maxime aferente acestora Perete tip P2 (75 kg/m2)		
SLU (vant) = 0,54 kN/m2	F = 0,027 kN/m	Mef = 0,3375 kNm
SLU (seism)= 133,2 kN/m2	F = 6,66 kN/m	Mef = 83,25 kNm
SLS (vant) = 0,36 kN/m2	F = 0,018 kN/m	Mef = 0,225 kNm
SLS (seism) = 115,92 kN/m2	F = 5,796 kN/m	Mef = 72,45 kNm
$M_{max} = 83,25 \text{ kNm}$		
$W_{nec} = 354,2553 \text{ cm}^3$		
Profil rectangular 300mm x 100mm -8mm		
$W_{el} = 209 \text{ cm}^3$ $F_y = 235 \text{ N/mm}^2$	2 buc	$M_{RD} = 98,23 \text{ kNm} > M_{max}$

SPECIFICATIE TEHNICA RIGIPS®
PENTRU RACORDUL PERETILOR DE GIPS CARTON

8.00.03 ST

Amplasament ag= 0,40g m/s²; Tc=1,6s
(FOCSANI, jud. VRANCEA)

	Perete cca 50 kg/m² (tip P1)							
H _{perete} =	12,00m	10,00m	9,00m	8,00m	7,00m	6,00m	5,00m	4,00m
Distanța interax grinzi/ pane acoperis/ stalpi [m]	Profil metalic rectangular de rezistență secundar h x b-t (mm)							
10	2 buc. 150x100x10	300x100x8	200x100x10	180x100x10	180x100x10	150x100x8	160x80x8	120x80x8
9.5	2 buc. 150x100x8	300x100x6	180x100x10	180x100x10	150x100x10	160x80x10	160x80x8	120x80x8
9	300x100x8	200x100x10	180x100x10	150x100x10	150x100x8	160x80x8	160x80x8	100x100x5
8.5	300x100x8	180x100x10	150x100x10	150x100x8	160x80x10	160x80x8	120x80x8	100x100x5
8	200x100x10	150x100x10	150x100x8	160x80x10	160x80x8	160x80x8	100x100x5	100x100x5
7.5	180x100x10	150x100x8	160x80x10	160x80x8	160x80x8	120x80x8	100x100x5	100x100x5
7	150x100x10	160x80x10	160x80x8	160x80x8	120x80x8	100x100x5	100x100x5	100x100x5
6.5	150x100x8	160x80x8	160x80x8	120x80x8	100x100x5	100x100x5	100x100x5	80x80x4
6	160x80x10	160x80x8	120x80x8	100x100x5	100x100x5	100x100x5	100x100x5	80x80x4
5.5	160x80x8	120x80x8	100x100x5	100x100x5	100x100x5	100x100x5	80x80x4	80x80x4
5	120x80x8	100x100x5	100x100x5	100x100x5	100x100x5	80x80x4	80x80x4	80x80x4
4.5	100x100x5	100x100x5	100x100x5	100x100x5	80x80x4	80x80x4	80x80x4	80x80x4
4	100x100x5	100x100x5	80x80x4	80x80x4	80x80x4	80x80x4	80x80x4	80x80x4

	Perete cca 75 kg/m² (tip P2)							
H _{perete} =	12,00m	10,00m	9,00m	8,00m	7,00m	6,00m	5,00m	4,00m
Distanța interax grinzi/ pane acoperis/ stalpi [m]	Profil metalic rectangular de rezistență secundar h x b-t (mm)							
10	2 buc. 300x100x8	2 buc. 180x100x10	2 buc. 180x100x10	2 buc. 150x100x8	300x100x8	200x100x10	150x100x10	160x80x10
9.5	2 buc. 200x100x10	2 buc. 180x100x10	2 buc. 150x100x10	300x100x8	200x100x10	180x100x10	150x100x10	160x80x10
9	2 buc. 200x100x10	2 buc. 150x100x10	300x100x8	300x100x8	180x100x10	150x100x10	150x100x8	160x80x8
8.5	2 buc. 200x100x8	2 buc. 150x100x8	300x100x8	200x100x10	180x100x10	150x100x10	160x80x10	160x80x8
8	2 buc. 200x100x6	300x100x8	300x100x6	180x100x10	150x100x10	150x100x8	160x80x8	120x80x8
7.5	300x100x8	200x100x10	180x100x10	150x100x10	150x100x8	160x80x10	160x80x8	100x100x5
7	300x100x8	180x100x10	150x100x10	150x100x8	160x80x10	160x80x8	120x80x8	100x100x5
6.5	200x100x10	150x100x10	150x100x8	160x80x10	160x80x8	160x80x8	100x100x5	100x100x5
6	180x100x10	150x100x8	160x80x10	160x80x8	160x80x8	120x80x8	100x100x5	100x100x5
5.5	150x100x10	160x80x10	160x80x8	160x80x8	160x80x5	100x100x5	100x100x5	100x100x5
5	160x80x10	160x80x8	120x80x8	120x80x8	100x100x5	100x100x5	100x100x5	80x80x4
4.5	160x80x8	120x80x8	100x100x5	100x100x5	100x100x5	100x100x5	80x80x4	80x80x4
4	120x80x8	100x100x5	100x100x5	100x100x5	100x100x5	80x80x4	80x80x4	80x80x4

EXEMPLU DE CALCUL

Amplasament:
BUCURESTI

ACTIUNEA VANTULUI

$q_b = 0,5$ kPa (presiunea/ suctiunea vantului ce actioneaza pe suprafete rigide interioare ale cladirii/structurii)

$w_i = \gamma_{iw} \times c_{pi} \times q_p(z_i)$
unde:

$\gamma_{iw} = 1$ (factorul de importanta -expunere)

c_{pi} (pozitiv) = 0,2

c_{pi} (negativ) = - 0,3

(coeficientul aerodinamic de presiune/suctiune pentru suprafete interioare)

$q_p(z_i) = 2$ (valoarea de varf a presiunii dinamice a vantului la cota Z_i)

Z_i = inaltimea de referinta pentru presiunea interioara

$w_i = 0,2$ kPa

$w_i = - 0,3$ kPa

ACTIUNEA SEISMICA

$a_g = 0,3$ g

$T_c = 1,6$ s

Fora seismica statica echivalenta

$F_{CNS}(z) = (\gamma_{CNS} \times a_g \times \beta_{CNS} \times K_z) \times m_{CNS} / q_{CNS}$

unde:

$\gamma_{CNS} = 1$ (factorul de importanta al CNS)

$\beta_{CNS} = 1$ (factorul de amplificare dinamica al CNS)

$q_{CNS} = 2,5$ (factorul de comportare a CNS)

$a_g = 0,3$ g (acceleratia terenului pentru proiectare pe amplasamentul considerat)

m_{CNS} = masa maxima a CNS in exploatare

$K_z = z = (z_{sup} + z_{inf}) / 2$ (factorul de amplificare a acceleratiei terenului pe inaltimea constructiei)

Tip perete	Fora seismica static echivalenta aferenta peretelui F_{CNS}	
P1 (cca 50 kg/m ²) Panotaj 2x (2x 12,5mm); UW/CW100	43200 N	43,2 kN 2,16 kN/m
P2 (cca 75 kg/m ²) Panotaj 2x (3x 12,5mm); UW/CW100	64800 N	64,8 kN 3,24 kN/m

Combinatii de incarcari si Momentele maxime aferente acestora
Perete tip P1 (50 kg/m²)

SLU (vant) = 0,45 kN/m ²	F = 0,0225 kN/m	Mef = 0,28125 kNm
SLU (seism)= 81,6 kN/m ²	F = 4,08 kN/m	Mef = 51,0 kNm
SLS (vant) = 0,3 kN/m ²	F = 0,015 kN/m	Mef = 0,1875 kNm
SLS (seism) = 72,96 kN/m ²	F = 3,648 kN/m	Mef = 45,6 kNm

$$M_{\max} = 51,0 \text{ kNm}$$

$$W_{\text{nec}} = 217,0213 \text{ cm}^3$$

Profil rectangular 150mm x 100mm -10mm

W _{el} = 123 cm ³ F _y = 235 N/mm ²	2 buc	M_{RD} = 57,81 kNm > Mmax
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Combinatii de incarcari si Momentele maxime aferente acestora
Perete tip P2 (75 kg/m²)

SLU (vant) = 0,45 kN/m ²	F = 0,0225 kN/m	Mef = 0,28125 kNm
SLU (seism)= 122,4 kN/m ²	F = 6,12 kN/m	Mef = 76,5 kNm
SLS (vant) = 0,3 kN/m ²	F = 0,018 kN/m	Mef = 0,1875 kNm
SLS (seism) = 109,44 kN/m ²	F = 5,796 kN/m	Mef = 68,4 kNm

$$M_{\max} = 76,5 \text{ kNm}$$

$$W_{\text{nec}} = 325,5319 \text{ cm}^3$$

Profil rectangular 200mm x 100mm -10mm

W _{el} = 164 cm ³ F _y = 235 N/mm ²	2 buc	M_{RD} = 77,08 kNm > Mmax
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SPECIFICATIE TEHNICA RIGIPS®
PENTRU RACORDUL PERETILOR DE GIPS CARTON

8.00.03 ST

Amplasament ag= 0,30g m/s²; Tc=1,6s
(BUCURESTI)

	Perete cca 50 kg/m² (tip P1)							
H _{perete} =	12,00m	10,00m	9,00m	8,00m	7,00m	6,00m	5,00m	4,00m
Distanța interax grinzi/ pane acoperis/ stalpi [m]	Profil metalic rectangular de rezistenta secundar h x b-t (mm)							
10	2 buc. 150x100x10	300x100x8	200x100x10	180x100x10	150x100x10	150x100x8	160x80x8	120x80x8
9.5	2 buc. 150x100x8	200x100x10	180x100x10	180x100x10	150x100x8	160x80x10	160x80x8	100x100x5
9	300x100x8	180x100x10	180x100x10	150x100x10	160x80x10	160x80x8	120x80x8	100x100x5
8.5	200x100x10	180x100x10	150x100x10	150x100x8	160x80x8	160x80x8	120x80x8	100x100x5
8	180x100x10	150x100x10	150x100x8	160x80x10	160x80x8	120x80x8	100x100x5	100x100x5
7.5	150x100x10	150x100x8	160x80x10	160x80x8	160x80x8	100x100x5	100x100x5	100x100x5
7	150x100x8	160x80x10	160x80x8	160x80x8	120x80x8	100x100x5	100x100x5	100x100x5
6.5	160x80x10	160x80x8	160x80x8	120x80x8	100x100x5	100x100x5	100x100x5	80x80x4
6	160x80x8	120x80x8	120x80x8	100x100x5	100x100x5	100x100x5	100x100x5	80x80x4
5.5	160x80x8	100x100x5	100x100x5	100x100x5	100x100x5	100x100x5	80x80x4	80x80x4
5	120x80x8	100x100x5	100x100x5	100x100x5	100x100x5	80x80x4	80x80x4	80x80x4
4.5	100x100x5	100x100x5	100x100x5	100x100x5	80x80x4	80x80x4	80x80x4	80x80x4
4	100x100x5	100x100x5	80x80x4	80x80x4	80x80x4	80x80x4	80x80x4	80x80x4

	Perete cca 75 kg/m² (tip P2)							
H _{perete} =	12,00m	10,00m	9,00m	8,00m	7,00m	6,00m	5,00m	4,00m
Distanța interax grinzi/ pane acoperis/ stalpi [m]	Profil metalic rectangular de rezistenta secundar h x b-t (mm)							
10	2 buc. 200x100x10	2 buc. 180x100x10	2 buc. 150x100x10	2 buc. 150x100x8	300x100x8	180x100x10	150x100x10	160x80x10
9.5	2 buc. 180x100x10	2 buc. 150x100x10	300x100x8	300x100x8	200x100x10	180x100x10	150x100x8	160x80x8
9	2 buc. 180x100x10	300x100x8	300x100x8	300x100x8	180x100x10	150x100x10	160x80x10	160x80x8
8.5	2 buc. 150x100x10	300x100x8	300x100x6	200x100x10	150x100x10	150x100x8	160x80x8	160x80x8
8	300x100x8	300x100x6	180x100x10	180x100x10	150x100x10	150x100x8	160x80x8	120x80x8
7.5	300x100x8	180x100x10	180x100x10	150x100x10	150x100x8	160x80x8	160x80x8	100x100x5
7	200x100x10	180x100x10	150x100x10	150x100x8	160x80x10	160x80x8	120x80x8	100x100x5
6.5	180x100x10	150x100x10	150x100x8	160x80x10	160x80x8	120x80x8	100x100x5	100x100x5
6	150x100x10	160x80x10	160x80x8	160x80x8	120x80x8	100x100x5	100x100x5	100x100x5
5.5	150x100x8	160x80x8	160x80x8	120x80x8	100x100x5	100x100x5	100x100x5	80x80x4
5	160x80x8	160x80x8	120x80x8	100x100x5	100x100x5	100x100x5	100x100x5	80x80x4
4.5	160x80x8	100x100x5	100x100x5	100x100x5	100x100x5	100x100x5	80x80x4	80x80x4
4	100x100x5	100x100x5	100x100x5	100x100x5	100x100x5	80x80x4	80x80x4	80x80x4

EXEMPLU DE CALCUL

Amplasament:
CLUJ NAPOCA, Jud. Cluj

ACTIUNEA VANTULUI

$q_b = 0,5$ kPa (presiunea/ suptiunea vantului ce actioneaza pe suprafete rigide interioare ale cladirii/structurii)

$w_i = \gamma_{iw} \times c_{pi} \times q_p(z_i)$
unde:

$\gamma_{iw} = 1$ (factorul de importanta -expunere)

c_{pi} (pozitiv) = 0,2

c_{pi} (negativ) = - 0,3

(coeficientul aerodinamic de presiune/suctiune pentru suprafete interioare)

$q_p(z_i) = 2$ (valoarea de varf a presiunii dinamice a vantului la cota Z_i)

Z_i = inaltimea de referinta pentru presiunea interioara

$w_i = 0,2$ kPa

$w_i = - 0,3$ kPa

ACTIUNEA SEISMICA

$a_g = 0,1$ g

$T_c = 0,7$ s

Fora seismica statica echivalenta

$F_{CNS}(z) = (\gamma_{CNS} \times a_g \times \beta_{CNS} \times K_z) \times m_{CNS} / q_{CNS}$

unde:

$\gamma_{CNS} = 1$ (factorul de importanta al CNS)

$\beta_{CNS} = 1$ (factorul de amplificare dinamica al CNS)

$q_{CNS} = 2,5$ (factorul de comportare a CNS)

$a_g = 0,1$ g (acceleratia terenului pentru proiectare pe amplasamentul considerat)

m_{CNS} = masa maxima a CNS in exploatare

$K_z = z = (z_{sup} + z_{inf}) / 2$ (factorul de amplificare a acceleratiei terenului pe inaltimea constructiei)

Tip perete	Fora seismica static echivalenta aferenta peretelui F_{CNS}	
P1 (cca 50 kg/m ²) Panotaj 2x (2x 12,5mm); UW/CW100	14400 N	14,4 kN 0,72 kN/m
P2 (cca 75 kg/m ²) Panotaj 2x (3x 12,5mm); UW/CW100	21600 N	21,6 kN 1,08 kN/m

Combinatii de incarcari si Momentele maxime aferente acestora Perete tip P1 (50 kg/m2)		
SLU (vant) = 0,45 kN/m2	F = 0,0225 kN/m	Mef = 0,28125 kNm
SLU (seism)= 67,2 kN/m2	F = 3,36 kN/m	Mef = 42,0 kNm
SLS (vant) = 0,3 kN/m2	F = 0,015 kN/m	Mef = 0,1875 kNm
SLS (seism) = 64,32 kN/m2	F = 3,216 kN/m	Mef = 40,2 kNm
M _{max} = 42,0 kNm		
W _{nec} = 178,7234 cm ³		
Profil rectangular 300mm x 100mm -8mm		
W _{el} = 209 cm3 F _y = 235 N/mm ²	1 buc	M _{RD} = 49,115 kNm > Mmax

Combinatii de incarcari si Momentele maxime aferente acestora Perete tip P2 (75 kg/m2)		
SLU (vant) = 0,45 kN/m2	F = 0,0225 kN/m	Mef = 0,28125 kNm
SLU (seism)= 100,8 kN/m2	F = 5,04 kN/m	Mef = 63,00 kNm
SLS (vant) = 0,3 kN/m2	F = 0,015 kN/m	Mef = 0,1875 kNm
SLS (seism) = 96,48 kN/m2	F = 4,824 kN/m	Mef = 60,3 kNm
M _{max} = 63,00 kNm		
W _{nec} = 268,0851 cm ³		
Profil rectangular 180mm x 100mm -10mm		
W _{el} = 147 cm3 F _y = 235 N/mm ²	2 buc	M _{RD} = 69,09 kNm > Mmax

SPECIFICATIE TEHNICA RIGIPS®
PENTRU RACORDUL PERETILOR DE GIPS CARTON

8.00.03 ST

Amplasament ag= 0,10g m/s²; Tc=0,7s
(CLUJ NAPOCA)

	Perete cca 50 kg/m² (tip P1)							
H _{perete} =	12,00m	10,00m	9,00m	8,00m	7,00m	6,00m	5,00m	4,00m
Distanța interax grinzi/ pane acoperis/ stalpi [m]	Profil metalic rectangular de rezistența secundar h x b-t (mm)							
10	300x100x8	180x100x10	180x100x10	150x100x10	150x100x8	160x80x10	160x80x8	120x80x8
9.5	200x100x10	180x100x10	150x100x10	150x100x8	160x80x10	160x80x8	160x80x8	100x100x5
9	180x100x10	150x100x10	150x100x8	160x80x10	160x80x8	160x80x8	120x80x8	100x100x5
8.5	180x100x10	150x100x8	160x80x10	160x80x8	160x80x8	120x80x8	100x100x5	100x100x5
8	150x100x10	160x80x10	160x80x10	160x80x8	160x80x8	100x100x5	100x100x5	100x100x5
7.5	150x100x8	160x80x8	160x80x8	160x80x8	120x80x8	100x100x5	100x100x5	100x100x5
7	160x80x10	160x80x8	160x80x8	120x80x8	100x100x5	100x100x5	100x100x5	100x100x5
6.5	160x80x8	120x80x8	120x80x8	100x100x5	100x100x5	100x100x5	100x100x5	80x80x4
6	160x80x8	100x100x5	100x100x5	100x100x5	100x100x5	100x100x5	80x80x4	80x80x4
5.5	120x80x8	100x100x5	100x100x5	100x100x5	100x100x5	80x80x4	80x80x4	80x80x4
5	100x100x5	100x100x5	100x100x5	100x100x5	80x80x4	80x80x4	80x80x4	80x80x4
4.5	100x100x5	100x100x5	80x80x4	80x80x4	80x80x4	80x80x4	80x80x4	80x80x4
4	100x100x5	80x80x4	80x80x4	80x80x4	80x80x4	80x80x4	80x80x4	80x80x4

	Perete cca 75 kg/m² (tip P2)							
H _{perete} =	12,00m	10,00m	9,00m	8,00m	7,00m	6,00m	5,00m	4,00m
Distanța interax grinzi/ pane acoperis/ stalpi [m]	Profil metalic rectangular de rezistența secundar h x b-t (mm)							
10	2 buc. 180x100x10	2 buc. 150x100x10	300x100x8	300x100x8	200x100x10	180x100x10	150x100x8	160x80x8
9.5	2 buc. 150x100x10	300x100x8	300x100x8	200x100x10	180x100x10	150x100x10	160x80x10	160x80x8
9	2 buc. 150x100x10	300x100x8	200x100x10	180x100x10	150x100x10	150x100x8	160x80x10	160x80x8
8.5	300x100x8	200x100x10	180x100x10	180x100x10	150x100x10	160x80x10	160x80x8	120x80x8
8	300x100x8	180x100x10	180x100x10	150x100x10	150x100x8	160x80x8	160x80x8	100x100x5
7.5	200x100x10	180x100x10	150x100x10	150x100x8	160x80x10	160x80x8	120x80x8	100x100x5
7	180x100x10	150x100x10	150x100x8	160x80x10	160x80x8	120x80x8	100x100x5	100x100x5
6.5	150x100x10	160x80x10	160x80x8	160x80x8	160x80x8	100x100x5	100x100x5	100x100x5
6	150x100x8	160x80x8	160x80x8	120x80x8	120x80x8	100x100x5	100x100x5	100x100x5
5.5	160x80x8	160x80x8	120x80x8	100x100x5	100x100x5	100x100x5	100x100x5	80x80x4
5	160x80x8	120x80x8	100x100x5	100x100x5	100x100x5	100x100x5	80x80x4	80x80x4
4.5	120x80x8	100x100x5	100x100x5	100x100x5	100x100x5	80x80x4	80x80x4	80x80x4
4	100x100x5	100x100x5	100x100x5	100x100x5	80x80x4	80x80x4	80x80x4	80x80x4