

A TERVEZÉSI
RUGALMASSÁG
UNIVERZUMA

ECOPHON FOCUS™



Ecophon®
SAINT-GOBAIN

A SOUND EFFECT ON PEOPLE

Tartalom

04 AZ ECOPHONRÓL

06 A JÓ AKUSZTIKA MINDENHOL SZÁMÍT

08 A FENNTARTHATÓSÁG MINT VEZÉRCSILLAG

10 A TERVEZÉSI RUGALMASSÁG UNIVERZUMA AZ ECOPHON FOCUS™ TERMÉKCSALÁDDAL

12 ECOPHON FOCUS TERMÉKSKÁLA

- 16 Focus A
- 16 Focus B
- 17 Focus Ds
- 17 Focus Dg
- 18 Focus D/A
- 18 Focus E
- 19 Focus Ez
- 19 Focus F
- 20 Focus Lp
- 20 Focus SQ
- 21 Focus Levels
- 21 Focus Flexiform A
- 22 Focus Edge 500
- 23 Focus Fixiform E
- 23 Focus Fixiform Ds
- 24 Focus Frieze
- 24 Focus Wing
- 25 Square 43
- 26 Dot
- 27 Line

28 SZÍNEK ÉS FELÜLETEK

30 AZ ECOPHON FOCUS ÁTTEKINTÉSE

32 A RENDSZER TULAJDONSÁGAI

Akusztika, műszaki jellemzők és szerelési rajzok

Jelen kiadványunkban az Ecophon termékcsaládjához mellé más gyártók termékeit is bemutatjuk. Az itt közölt általános útmutatásra szolgál az arról, hogy az egyes termékek milyen felhasználásra a legalkalmasabbak. A műszaki adatok a tipikus tesztörvények, illetve a hosszú távú normál körülmények között tapasztalt eredményeken alapulnak. A termékek és rendszerek itt közölt képességei és jellemzői csak az utasítások, szerelési rajzok és ismertető, karbantartási előírások, valamint egyéb feltételek és ajánlások figyelembe vétele mellett tekinthetők érvényesnek. Az ezektől való eltérések, például a kiegészítő elemek módosítása esetén az Ecophon nem tud felelősséget vállalni a következményekért, a termékjellemzőkért, illetve azért, hogy termékei betöltsék funkciójukat. A jelen kiadványban közölt leírások, illusztrációk és méretadatok általános tájékoztatásra szolgálnak, és nem tekinthetők semmilyen szerződés részének. Az Ecophon fenntartja a jogot a termékek előzetes értesítés nélküli módosítására. Az esetleges nyomdai vagy fordítási hibákért nem vállalunk felelősséget. A legfrissebb adatokért keresse fel weboldalunkat: www.ecophon.hu, illetve forduljon az Önhöz legközelebbi Ecophon-képviselőhöz.





A természet hangja

A MINDENNAPOKBAN

A Saint-Gobain Ecophon termékei nagyban elősegítik a munkához, a gyógyításhoz és a tanuláshoz legelőnyösebb beltéri környezetek kialakítását. Mindezt olyan akusztikai termékek és rendszerek fejlesztésével, gyártásával és értékesítésével érjük el, amelyeket az emberi hallás természetes evolúciója ihletett – célunk, hogy beltérben is a szabadban megszokott hallási élményt kínáljuk, mert hiszünk benne, hogy ez a legjobb az embereknek.

Büszkén és minden erőnkkel azon dolgozunk, hogy a munkakörnyezetekben minden tökéletesen muzsikáljon. Szeretnénk megvalósítani a célkitűzésünket, ezért elszántan dolgozunk azon, hogy olyan teremakusztikát teremtsünk, amely az emberek jólétét szolgálja – legyen szó bármilyen helyiségről, tevékenységről vagy igényről.

A jó akusztika

MINDENHOL SZÁMÍT

Az akusztika jelentőségét gyakran alábecsülik. A hangok nagyban befolyásolják a mindennapi életünket, bizonyított, hogy a beltéri akusztika tudományos alapú fejlesztése javítja a teljesítményünket.

De milyen is az emberi fül számára ideális beltéri akusztika? Egy olyan hangzás, amely azon alapul, ahogyan a szabadban érzékeljük a hangokat. Az emberi hallás természetes módon alkalmazkodott a kültéri környezetbe, ahol sem a mennyezet, sem a falak nem verik vissza a hangokat.

Ezért is áll az Ecophon tevékenységének középpontjában az, hogy a beltéri környezeteket is felruházzuk a természetben megtalálható akusztikai jellemzőkkel. Célunk, hogy a beltéri helyiségeket a hallás természetes módjához optimalizáljuk, így a beszéd és a hangok szükség esetén jobban hallhatók és érthetőek lesznek, miközben a helyiségek a teljesítmény és a jóllét fokozásához is hozzájárulnak.

Mindez általában a mennyezetnél kezdődik. A faltól falig tartó akusztikus mennyezet a legegyszerűbb módja, hogy egy adott területen nagyméretű hangelnyelő felületet alakítsunk ki, és általában ez a legjobb megoldás a hang erősségének csökkentésére, a visszaverési idő lerövidítésére, valamint a beszédtiltságság és az általános, kellemes hangélmény fokozására is.

A valóban optimális akusztikához azonban valószínűleg különböző típusú hangelnyelőkre is szüksége lesz, amelyeket a megfelelő stratégia szerint kell elhelyezni a helyiségben – ilyenek a falra szerelt panelek és a szabadon álló térelválasztók, csak hogy két példát említsünk. Tehát a teljes körű megközelítés a legmegfelelőbb az egyes helyiségekre jellemző általános hangszint és hangterjedés csökkentéséhez. Az Ecophon pontosan ebben segíthet Önnek.



Fenntarthatóság

MINT VEZÉRCSILLAG

Az Ecophonnál a fenntarthatóság alapvető szerepet játszik abban, hogy kik vagyunk és hogyan dolgozunk. Ez egyfajta ígéret, hogy minden nap, minden szempontból, az élet minden területén többet adhassunk kollégáinknak, ügyfeleinknek és partnereinknek. A fenntarthatóság az innováció egy olyan típusú megközelítése, amely mindig a természet oldalán áll, és amely azon személyek igényeihez és környezetéhez igazodik, akik végül majd profitálnak belőle. Emellett egyfajta elkötelezettség is, melynek értelmében a lehető legkevesebbet vesszük el ahhoz, hogy a vártnál többet tehesünk – így a jövő generációi is megtapasztalhatják, milyen is az, amikor a bolygónk az életfenntartás szempontjából a legjobb formáját hozza.

Büszkék vagyunk arra, hogy minden egyes termékünk a fenntarthatóság jegyében születik. Ez a kiválasztott anyagokra és minden egyéb tényezőre, többek között a gyártólétesítményekben használt tiszta energiára, valamint a termékek és szolgáltatások fejlesztésének összes szakaszában, az ötlettől az innovációig jelen lévő átláthatóságra, nyomonkövethetőségre és elszámoltathatóságra egyaránt vonatkozik. Ennek köszönhető, hogy iparágszinten is alacsony ökológiai lábnyommal rendelkezünk. A hiteles fenntarthatósághoz ugyanis átfogó erőfeszítések szükségesek, amelyek egyetlen kihívást sem hagynak figyelmen kívül, és egyetlen lehetőséget sem hagynak kihasználatlanul, továbbá segítenek azon ígéret betartásában, amely végső soron az Ecophon összes munkatársát vezérli: az emberközpontú akusztika biztosításában.



Ecophon FOCUS™

A TERVEZÉSI RUGALMASSÁG UNIVERZUMA

Az Ecophon Focus™ a legátfogóbb rendszercsaládunk, amely a különböző élkialakítások, formák, szintek és szerelési módok révén lehetőségek széles tárházához alkalmazható.

- „A” osztályú hangelnyelés
- A 6 egyedi megoldás mellett 10 különböző élváltozat
- Prémium felület kiváló minőséggel és matt megjelenéssel

A Focus kiváló választás cellás irodákhoz, folyosókhoz, recepciókhoz, bejárati csarnokokhoz, várótermekhez, csoportos munkaterületekhez és egyéb olyan nyilvános területekhez, ahol a vizuális megjelenés és a hangminőség egyaránt fontos.

A Focus termékcsaládba közvetlenül a mennyezethez rögzíthető panelek is tartoznak. Ezek olyan terekhez biztosítanak lehetőségeket, amelyek látszólag nehezen, vagy egyáltalán nem fejleszthetők akusztikusan, például lépcsőházak, alagsorok és alacsony mennyezetű helyiségek.



Minimum **51%**

ban fogyasztói felhasználás után újrahasznosított anyagokból

Iparágyszinten alacsony
CO₂-kibocsátással
 rendelkeznek, kivételes
 nyersanyagokból és megújuló
 energiák széles körű
 felhasználásával készülnek

ECOPHON FOCUS™ TERMÉKSKÁLA

A Focus termékcsalád kiváló akusztikai jellemzőkkel rendelkező, vonzó megjelenésű és minden igényt kielégítő, faltól falig tartó álmennyezeteket tartalmaz, így tökéletes megoldást jelent minden ügyfél számára.

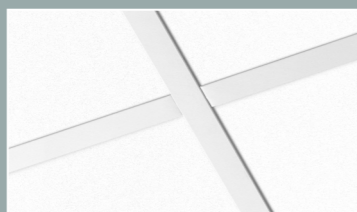
A Focus termékcsalád hat egyedi kiegészítő megoldást tartalmaz a szintváltásokhoz, a

falvégekhez és a szabadon függő mennyezetekhez. Kialakítása révén a mennyezet belesimul a környezetbe, és összességében esztétikusabb megjelenést biztosít.

A Focus Levels még több tervezési lehetőséget kínál. A Levels használatával különböző vastagságú és méretű paneleket kombinálva alakíthat ki egyedi, lépcsőzetes megjelenést.

Focus A

600×600×20
 1200×600×20
 1200×1200×20
 1600×600×20
 1800×600×20
 2000×600×20
 2400×600×20



Focus B

600×600×20
 1200×600×20



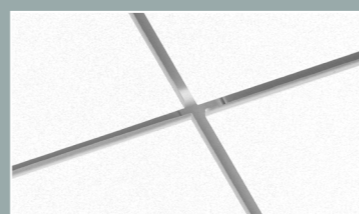
Focus D_s

600×600×20
 1200×600×20
 1200×1200×20
 1600×600×20
 1800×600×20
 2000×600×20
 2400×600×20



Focus D_g

600×600×20
 1200×600×20
 1200×1200×25
 1600×600×20
 1800×600×20
 2000×600×20
 2400×600×20



Focus D/A

1720×600×20
 2000×600×20
 2400×600×20



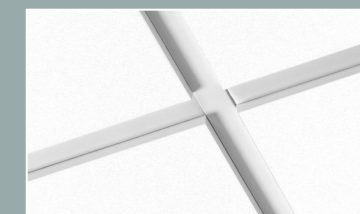
Focus E_z

600×600×40



Focus E

600×600×20
 1200×600×20
 1200×1200×20
 1600×600×20
 1800×600×20
 2000×600×20
 2400×600×20



Focus F

600×600×20
 1200×600×20



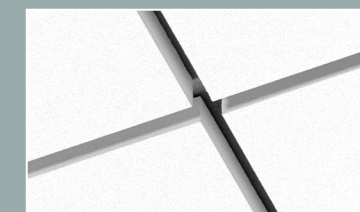
Focus L_p

600×150×20
 600×300×20
 600×600×20
 1200×150×20
 1200×300×20
 1200×600×20
 1800×600×20



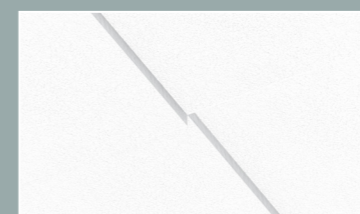
Focus SQ

600×600×20
 1200×600×20



Focus LEVELS

600×600×20
 1200×600×20
 1200×300×20
 600×600×30
 1200×600×30
 1200×300×30
 600×600×40
 1200×300×40



Focus FLEXIFORM A

1200×600×30
 1600×600×30
 2000×600×30
 2400×600×30



FOCUS FIXIFORM E

1200×600×20



FOCUS FIXIFORM Ds

1200×600×20
1500×600×20
1900×600×20
2300×600×20



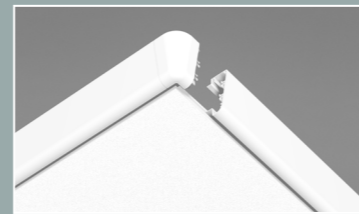
FOCUS FRIEZE

2400×600×20



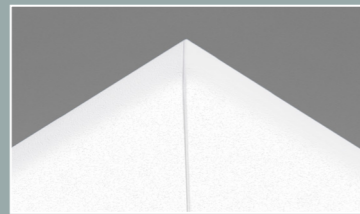
FOCUS EDGE 500

600×600×20
1200×600×20
1200×1200×20
1200×1200×25



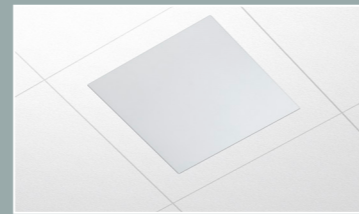
FOCUS WING

600×200×50
1200×200×50



SQUARE 43

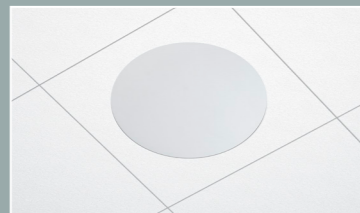
Edge Ds, Dg, E:
600×600×20



Edge Ez:
600×600×40

DOT

Edge Ds, Dg, E:
600×600×20



Edge Ez:
600×600×40

LINE

Edge Lp:
1200×150×20
1200×300×20



Edge Ds, Dg, E:
1200×600×20





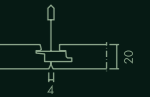
Focus A

Látható tartószerkezet és egyszerűen leszerelhető lapok. Számos méretben elérhető.



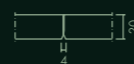
Focus D_s

Letört élek, amelyek diszkrét vajat hoznak létre a lapok között. Rejtett tartószerkezet.



Focus B

Ragasztóval való közvetlen rögzítéshez, ideális a minimális mélységű rendszert igénylő területekhez.



Focus D_g

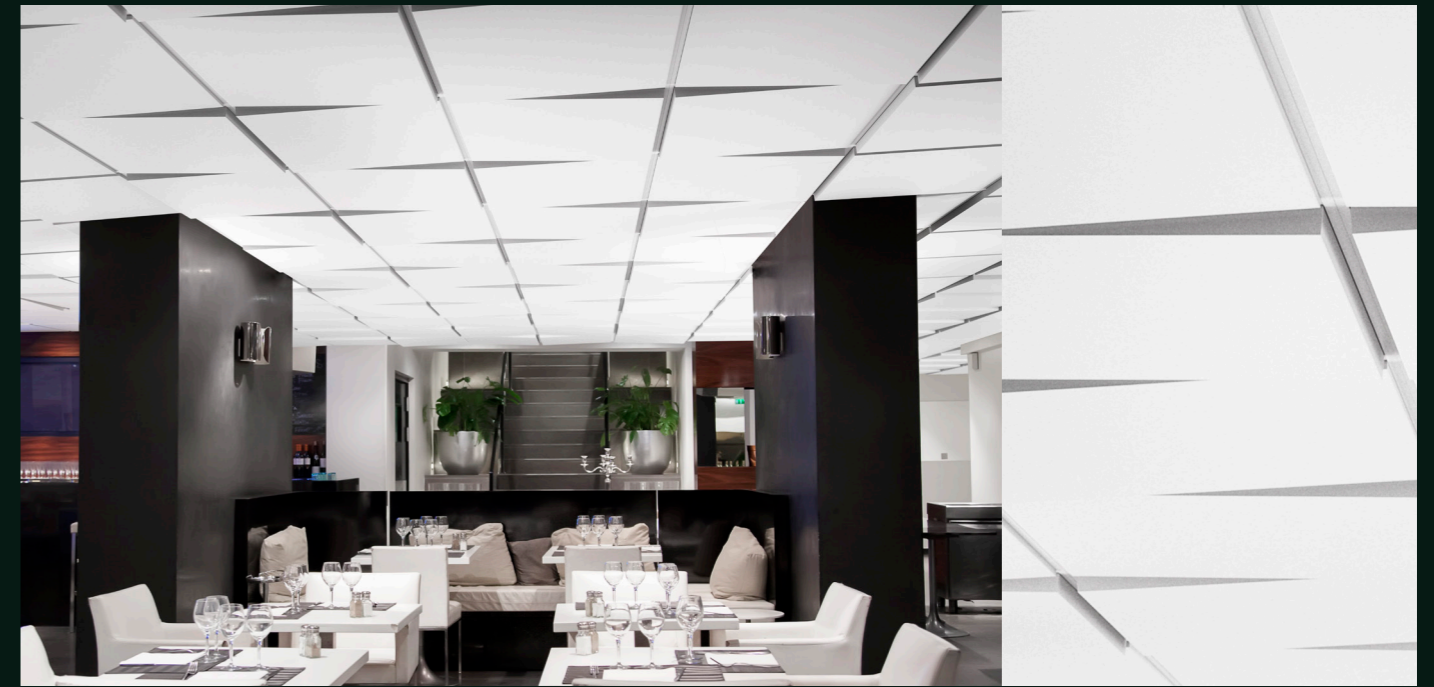
Egyedi élkialakítás rejtett tartóélekkel és a lebegés látszatát keltő megjelenéssel.





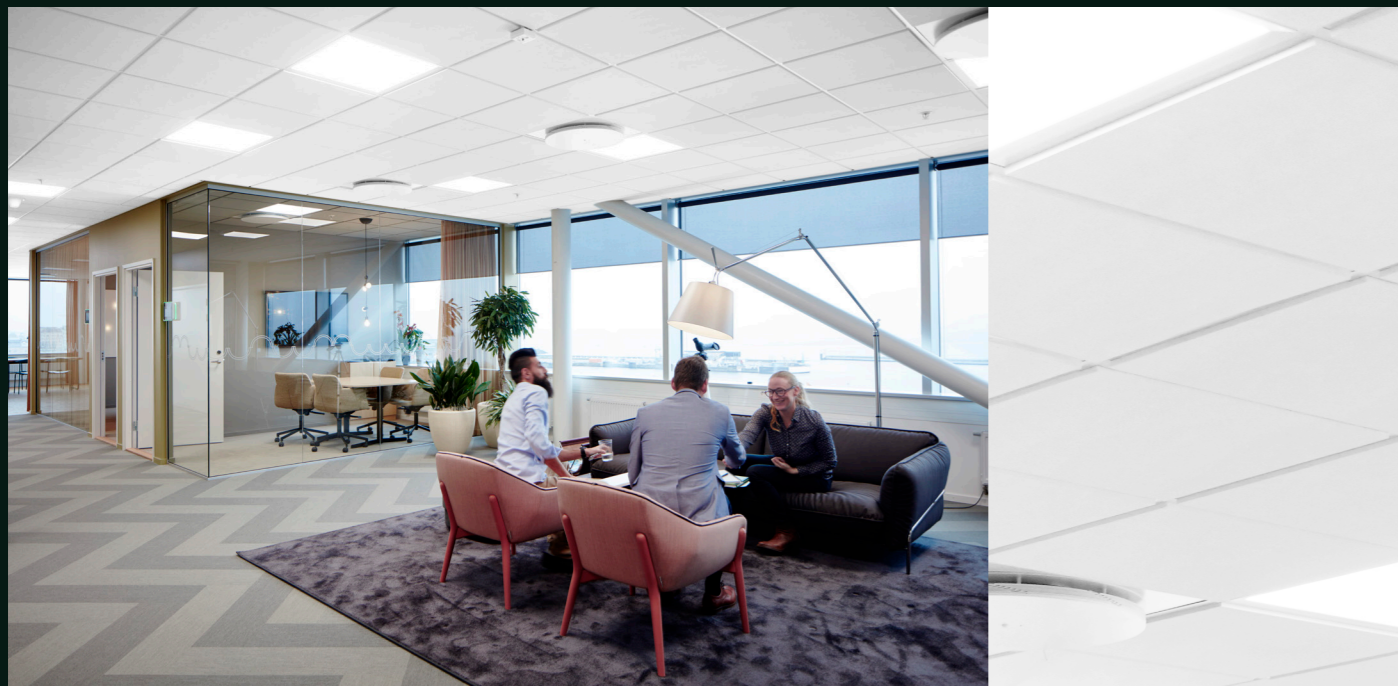
Focus D/A

Folyosókhöz és sávraszter megoldásokhoz. Hosszú panelek rejtett tartórendszerrel.



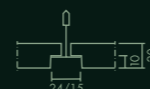
Focus E_z

A különböző szintű tartóélek ferde megjelenést és egyedi kialakítást tesznek lehetővé.



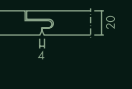
Focus E

Süllyesztett, látható tartószerkezet, amely árnyékhatast kelt az élen. Könnyen leszerelhető lapok.



Focus F

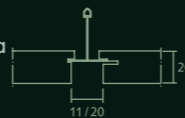
Csavarokkal való közvetlen rögzítéshez, ideális a minimális mélységű rendszert igénylő területekhez.





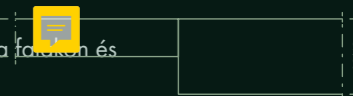
Focus Lp

Szabadalmaztatott rendszer, amellyel hosszú sávok hozhatók létre a mennyezeten, ezáltal egy adott irányt kijelölve ki a helyiségben.



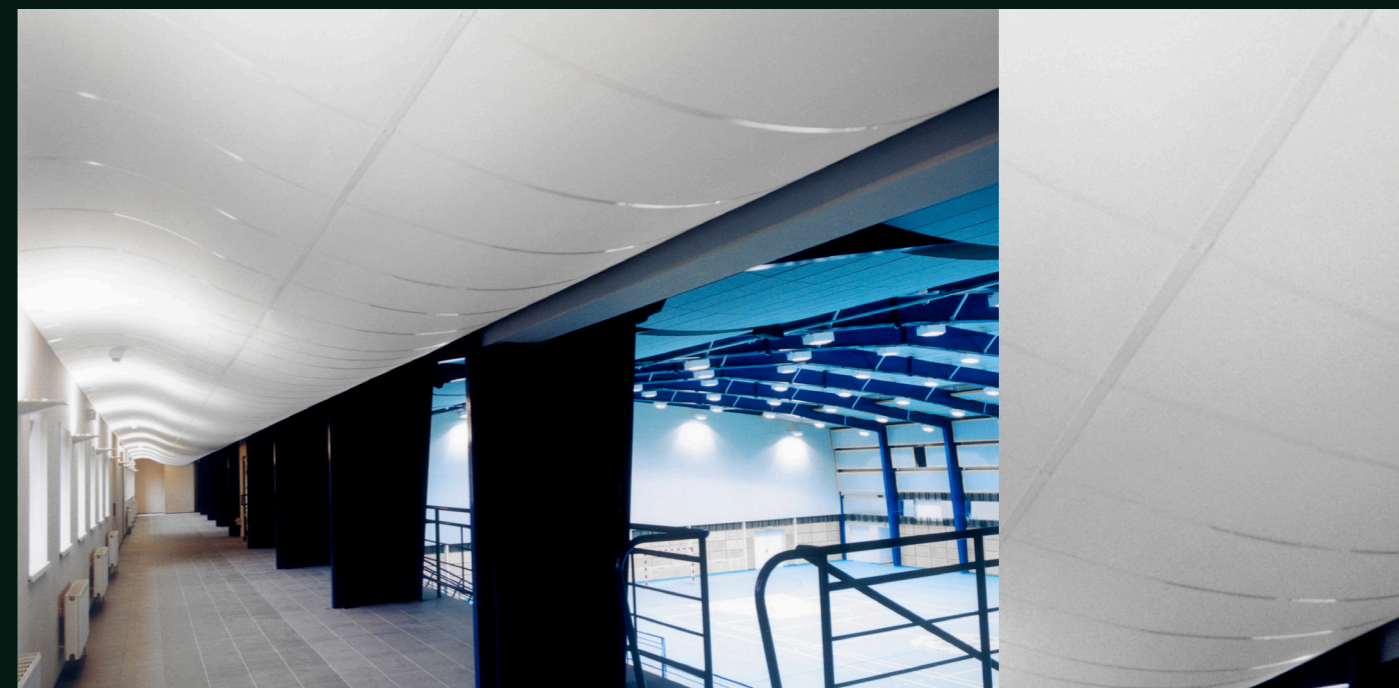
Focus LEVELS

A rendszerben különböző vastagságú panelek találhatóak, amelyekkel egyedi mintázatok alakíthatók ki a falakon és mennyezeten.



Focus SQ

Ragasztóval való közvetlen rögzítéshez. Felszerelés az egyes lapok közötti résekkel.



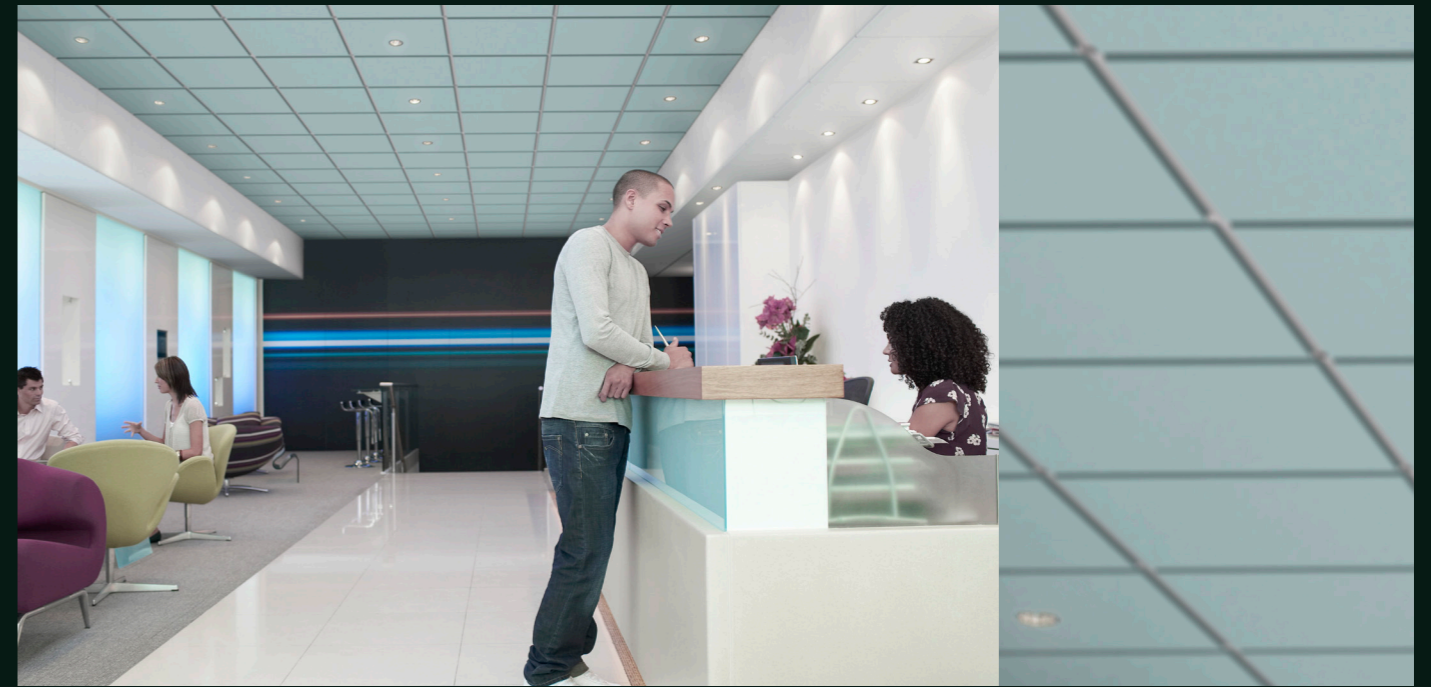
Focus FLEXIFORM A

Konkáv vagy konvex formára alakítható rugalmas panelek.

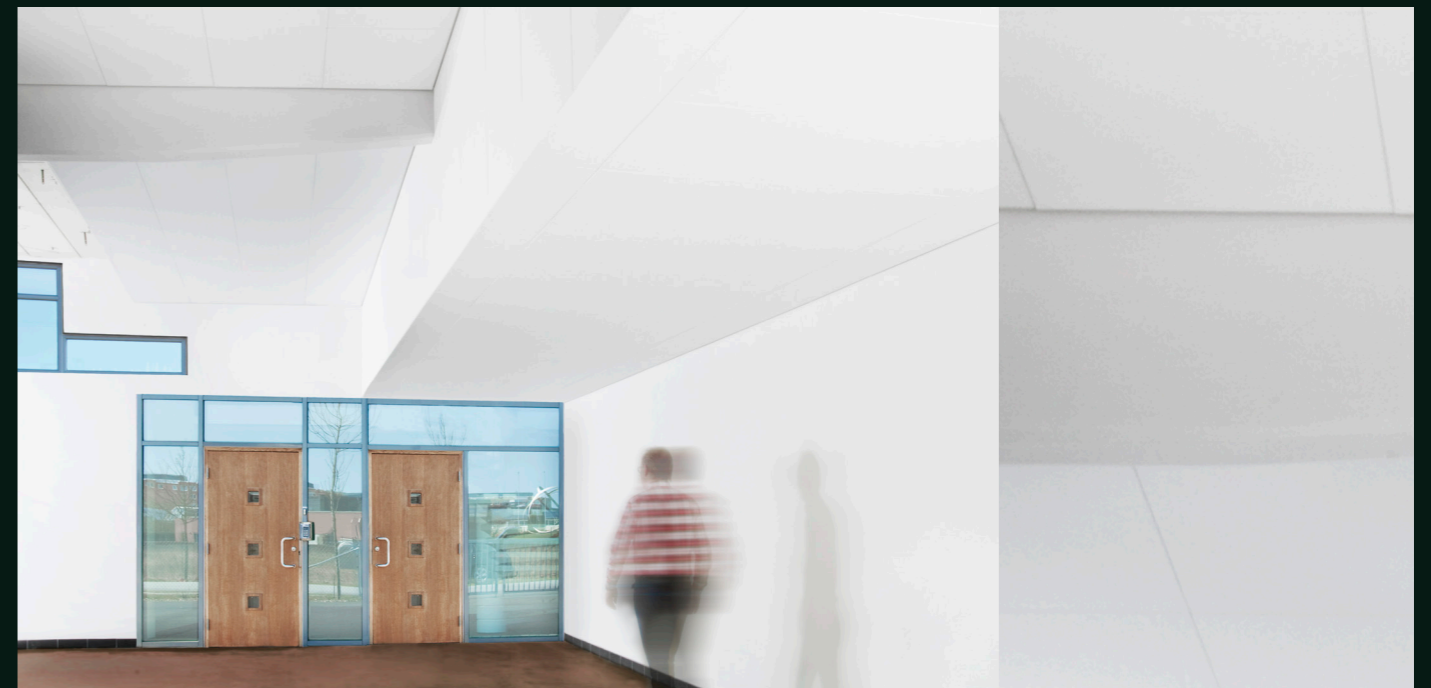
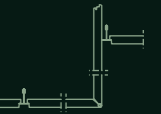




FOCUS EDGE 500
Élprofil szigetek kialakításához. Eloxált alumínium profil és cinkötvény sarkok.



FOCUS FIXIFORM E
Hajtható lapok finom átmenetekhez, ha szinteltérések vannak a mennyezeten.



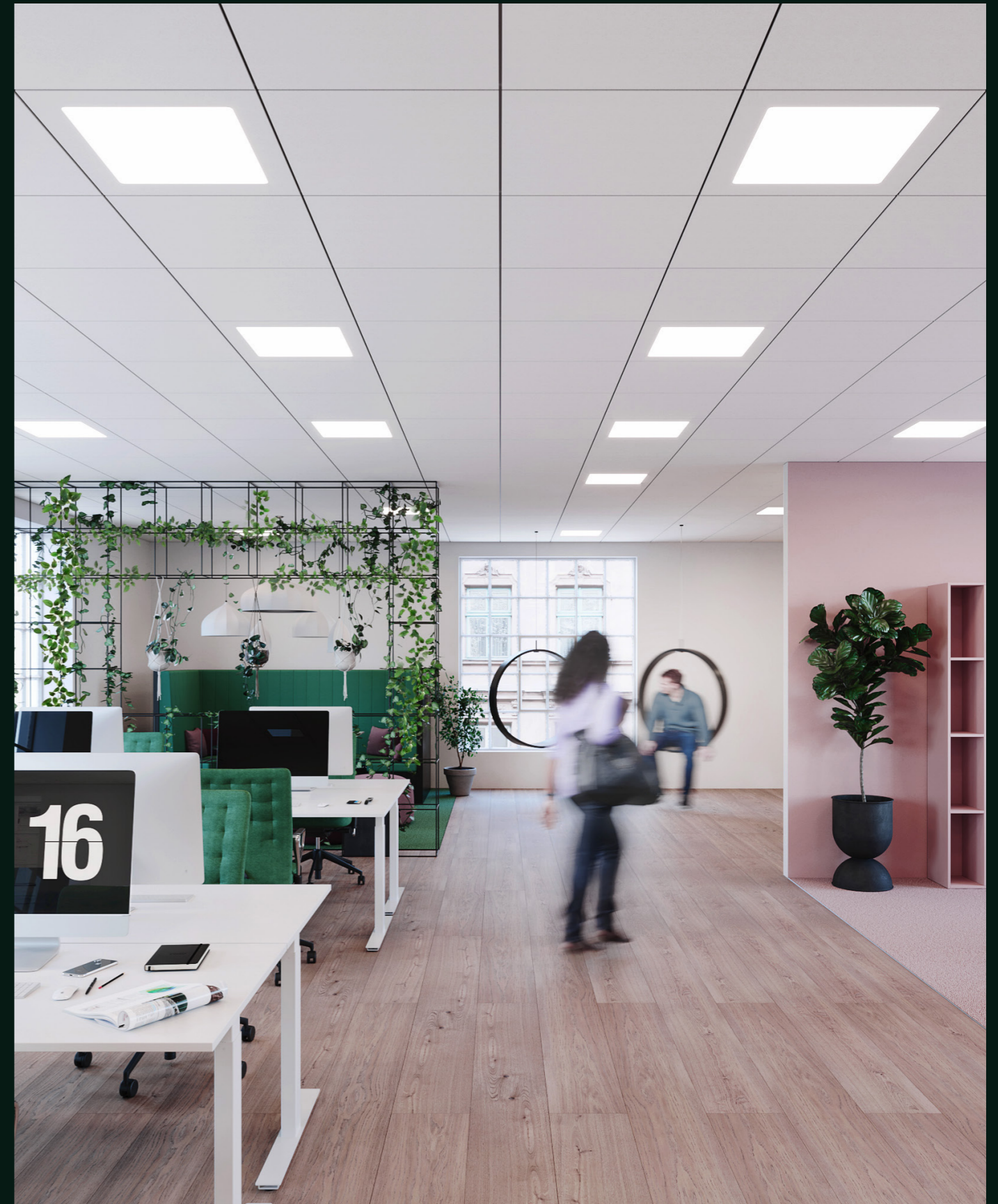
FOCUS FIXIFORM D_s
Hajtható lapok finom átmenetekhez, ha szinteltérések vannak a mennyezeten.





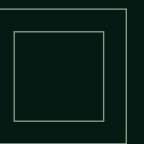
FOCUS FRIEZE

Végpanelek a mennyezet és a fal közötti finom átmenet kialakításához.



SQUARE 43

Páratlan kényelem a világítás terén és alacsony UGR érték.



FOCUS WING

Szárny formájú hangelnyelők szabadon függő álmennyezethez.



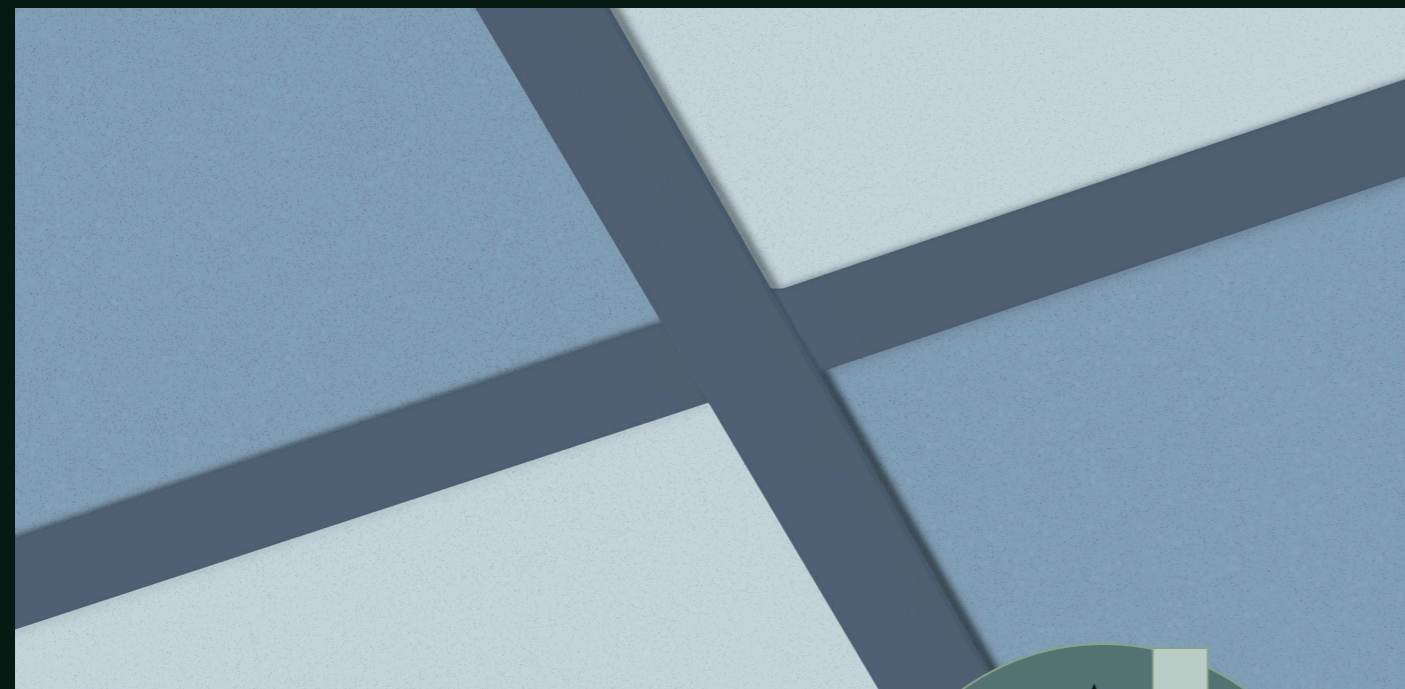


Dot
Páratlan kényelem a világítás terén és alacsony UGR érték.



LINE
A világítótest kiváló világítási komfortot biztosít, és határozott irányt ad a mennyezetnek.

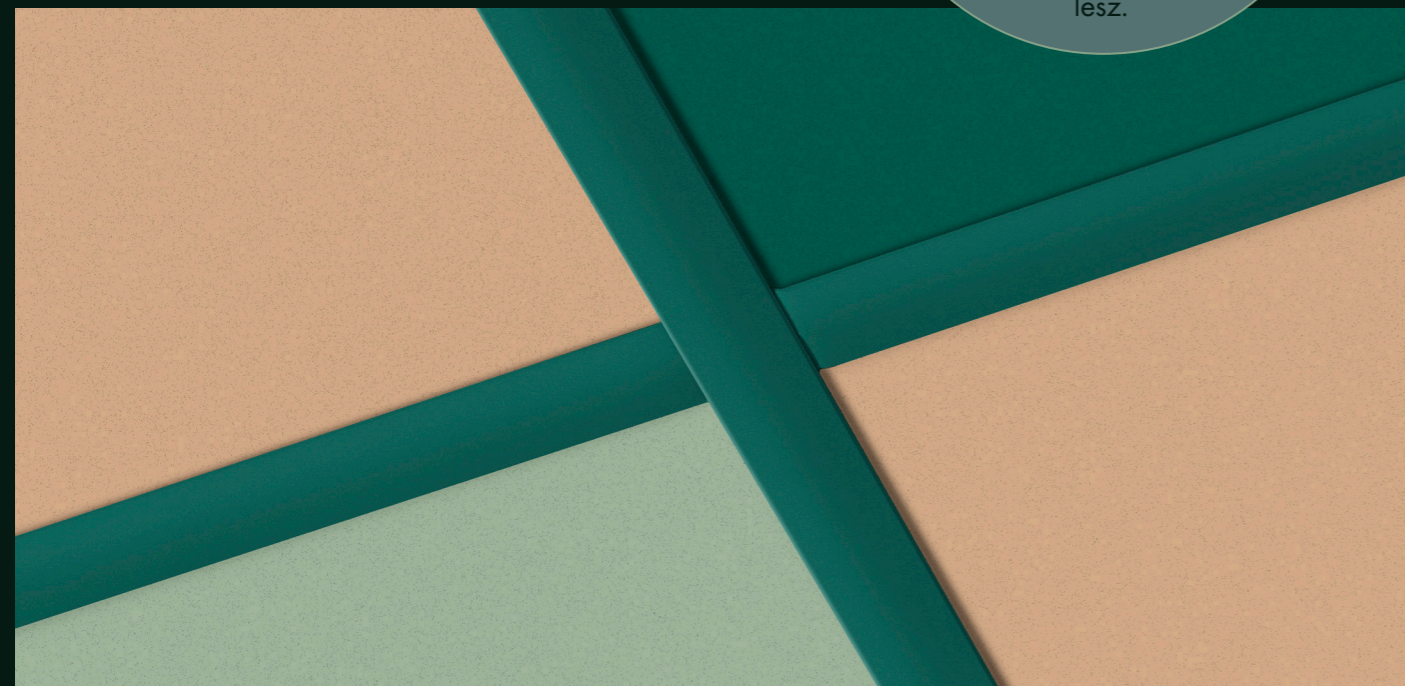




A TARTÓSZERKEZETEK SZÍNEI

- 15 színlehetőség a tartószerkezetekhez
- Saját kialakítást hozhat létre
- Az Akutex FT színekkel leginkább megegyező árnyalatok alkalmazásával finom mintázatokat, az FT színek keverésével pedig még hatásosabb kialakítást hozhat létre

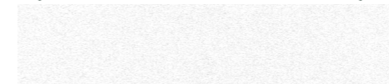
Az akusztikát segítő mennyezet gyakran a legnagyobb összefüggő felület a helyiségben. A mennyezet nemcsak a helyiség megjelenésére és hangulatára, hanem a felhasználók közérzetére is hatással lesz.



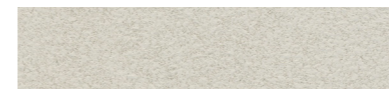
SZÍNEK ÉS FELÜLETEK

AKUTEX™ FT

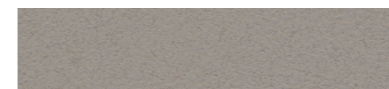
Az Akutex márkanév garantálja, hogy a termék kiváló felülettechnológiával készült. Kutatás-fejlesztési csapatunk munkájának középpontjában a vizuális szempontok, az akusztikai jellemzők, a munkakörnyezet, az építészeti trendek és a környezeti szempontok állnak. Ennek köszönhetően az Akutex mindig egy lépéssel a konkurencia előtt jár.



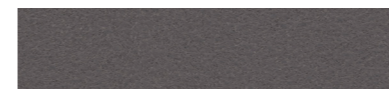
WHITE FROST | Fényvisszaverés: 85%.
Legközelebbi NCS színminta: S 0500-N.
Tartószerkezetek színe: NCS S 1000-N.



VOLCANIC ASH | Fényvisszaverés: 56%.
Legközelebbi NCS színminta: 2002-Y.



SILVER STONE | Fényvisszaverés: 29%.
Legközelebbi NCS színminta: S 4502-Y.



SILK SLATE | Fényvisszaverés: 13%.
Legközelebbi NCS színminta: S 7000-N.
Tartószerkezetek színe: NCS S 6500-N.



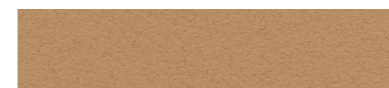
GOJI BERRY | Fényvisszaverés: 27%.
Legközelebbi NCS színminta: S 3030-Y80R.
Tartószerkezetek színe: NCS S 3030-Y80R.



SILENT STEAM | Fényvisszaverés: 45%.
Legközelebbi NCS színminta: S 2010-B.
Tartószerkezetek színe: NCS S 2005-R90B.



SCALLOP SHELLS | Fényvisszaverés: 76%.
Legközelebbi NCS színminta: S 0804-Y50R.
Tartószerkezetek színe: NCS S 0603-Y60R.



WET SAND | Fényvisszaverés: 35%.
Legközelebbi NCS színminta: S 3020-Y30R.
Tartószerkezetek színe: NCS S 3020-Y40R.



OCEAN STORM | Fényvisszaverés: 24%.
Legközelebbi NCS színminta: S 4020-R90B.
Tartószerkezetek színe: NCS S 4010-R90B.



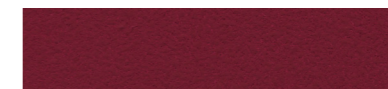
MOONLIGHT SKY | Fényvisszaverés: 7%.
Legközelebbi NCS színminta: S 7020-R90B.
Tartószerkezetek színe: NCS S 7010-R90B.



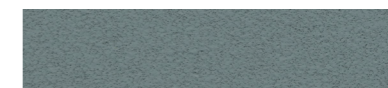
GOLDEN FIELD | Fényvisszaverés: 61%.
Legközelebbi NCS színminta: S 1040-G90Y.



SUNSET HEAT | Fényvisszaverés: 20%.
Legközelebbi NCS színminta: S 2070-Y60R.



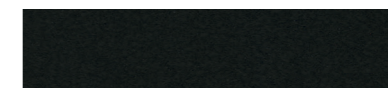
RUBY ROCK | Fényvisszaverés: 7%.
Legközelebbi NCS színminta: S 4050-R10B.



EUCALYPTUS LEAF | Fényvisszaverés: 23%.
Legközelebbi NCS színminta: S 5010-B30G.
Tartószerkezetek színe: NCS S 5010-B30G.



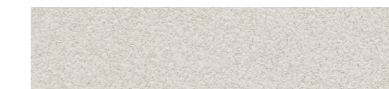
SUMMER FOREST | Fényvisszaverés: 10%.
Legközelebbi NCS színminta: S 6030-G10Y.
Tartószerkezetek színe: NCS S 6030-G10Y.



DARK DIAMOND | Fényvisszaverés: 4%.
Legközelebbi NCS színminta: S 9000-N.
Tartószerkezetek színe: NCS S 8000-N.



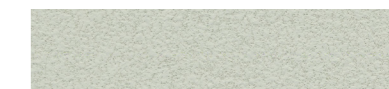
MORNING DRIZZLE | Fényvisszaverés: 69%.
Legközelebbi NCS színminta: S 1002-B.



CLOUDY DAY | Fényvisszaverés: 62%.
Legközelebbi NCS színminta: S 1500-N.



PEACH ROSE | Fényvisszaverés: 55%.
Legközelebbi NCS színminta: S 1515-Y80R.
Tartószerkezetek színe: NCS S 1510-Y80R.



HIGHLAND FOG | Fényvisszaverés: 55%.
Legközelebbi NCS színminta: S 2005-G.
Tartószerkezetek színe: NCS S 2005-G20Y.



SAGE GARDEN | Fényvisszaverés: 40%.
Legközelebbi NCS színminta: S 3010-B30G.
Tartószerkezetek színe: NCS S 3010-B30G.



FRESH CLOVER | Fényvisszaverés: 35%.
Legközelebbi NCS színminta: S 3020-G40Y.
Tartószerkezetek színe: NCS S 3020-G40Y.

MEGJEGYZÉS

A különböző gyártási tételek színben enyhén eltérhetnek egymástól.

A nyomtatott ábrákon feltüntetett színek eltérhetnek a valós színektől.

AZ ECOPHON FOCUS ÁTTEKINTÉSE

Él kialakítás	Termék	Hangnyelési osztály	Connect tartószerkezet	Méretetek (mm)	Ecophon Lighting	Lehetséges kombinációk
	Ecophon Focus A	A	T15/T24	600×600×20, 1200×600×20, 1200×1200×20, 1600×600×20, 1800×600×20, 2000×600×20, 2400×600×20		Ecophon Focus Flexiform A Ecophon Focus Frieze
	Ecophon Focus B	C	Közvetlen rögzítés	600×600×20 1200×600×20		
	Ecophon Focus Ds	A	T24	600×600×20, 1200×600×20, 1200×1200×20, 1600×600×20, 1800×600×20, 2000×600×20, 2400×600×20	Ecophon Dot Ecophon Square 43 Ecophon Line	Ecophon Focus Edge 500 Ecophon Focus Fixiform Ds Ecophon Focus Frieze Ecophon Focus Wing
	Ecophon Focus Dg	A	T24	600×600×20, 1200×600×20, 1200×1200×25, 1600×600×20, 1800×600×20, 2000×600×20, 2400×600×20	Ecophon Dot Ecophon Square 43 Ecophon Line	Ecophon Focus Edge 500 Ecophon Focus Frieze
	Ecophon Focus D/A	A	T24 sávraszter	1720×600×20, 2000×600×20, 2400×600×20		
	Ecophon Focus E	A	T15/T24	600×600×20, 1200×600×20, 1200×1200×20, 1600×600×20, 1800×600×20, 2000×600×20, 2400×600×20	Ecophon Dot Ecophon Square 43 Ecophon Line	Ecophon Focus Edge 500 Ecophon Focus Fixiform E Ecophon Focus Frieze Ecophon Focus Wing
	Ecophon Focus Ez	A	T24	600×600×40	Ecophon Dot Ecophon Square 43	
	Ecophon Focus F	C	Közvetlen rögzítés	600×600×20, 1200×600×20		
	Ecophon Focus Lp	A	T24	600×150×20, 600×300×20, 600×600×20 1200×150×20, 1200×300×20, 1200×600×20 1800×600×20	Ecophon Line	
	Ecophon Focus SQ	C	Közvetlen rögzítés	600×600×20, 1200×600×20		
	Ecophon Focus Levels	Legfeljebb A	Közvetlen rögzítés, mennyezet és fal	600×600×20, 1200×600×20, 1200×300×20, 600×600×30, 1200×600×30, 1200×300×30, 600×600×40, 1200×600×40, 1200×300×40		
	Ecophon Focus Flexiform A	A	T24	1200×600×30, 1600×600×30, 2000×600×30, 2400×600×30		Ecophon Focus A
	Ecophon Focus Fixiform E	A	T24	1200×600×20		Ecophon Focus E
	Ecophon Focus Fixiform Ds	A	T24	1200×600×20, 1500×600×20, 1900×600×20, 2300×600×20		Ecophon Focus Ds
	Ecophon Focus Frieze	A	T24	2400×600×20		Ecophon Focus A Ecophon Focus Ds Ecophon Focus Dg Ecophon Focus E
	Ecophon Focus Edge 500		T24	600×600×20, 1200×600×20, 1200×1200×20 1200×1200×25		Ecophon Focus Ds Ecophon Focus Dg Ecophon Focus E
	Ecophon Focus Wing	A	T24	600×200×50, 1200×200×50		Ecophon Focus Ds Ecophon Focus E



Az Ecophon Focus panelek a kiváló hangnyelésnek, a legszigorúbb előírásoknak is megfelelő alacsony VOC-kibocsátásnak, valamint a vegyszereket illetően, a hitelesített egészségügyi terméknílatkozatok által biztosított teljes átláthatóságnak köszönhetően hozzájárulnak az egészséges beltéri környezet kialakításához. Focus paneljeink alacsony ökológiai lábnyomát külső fél hitelesítette a környezetvédelmi terméknílatkozatokban.

A termékek nem gyúlékonyak: a Focus lapok üveggyapotmagját az EN ISO 1182 által előírt tűzveszélyességi vizsgálatoknak megfelelően ellenőriztük, és a nem éghető besorolást kapták. Az EN 13501-1 tűzállósági vizsgálatok szerinti besorolást kapcsolatban lásd az adott termék műszaki jellemzőit.

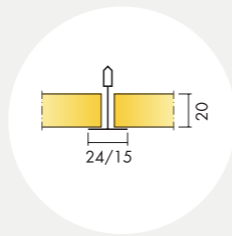
MEGJEGYZÉS

A termékekkel és a rendszerrel kapcsolatos további információkért, például felszerelési tanácsokért és a fenntarthatóságot igazoló dokumentumokért látogasson el a www.ecophon.com oldalra

A rendszer tulajdonságai

AKUSZTIKA, MŰSZAKI JELLEMZŐK ÉS SZERELÉSI RAJZOK

- 34 Focus A
- 37 Focus B
- 39 Focus Ds
- 42 Focus Dg
- 44 Focus D/A
- 46 Focus E
- 48 Focus Ez
- 50 Focus F
- 52 Focus Lp
- 54 Focus SQ
- 56 Focus Levels
- 58 Focus Flexiform A
- 60 Focus Edge 500
- 62 Focus Fixiform E
- 64 Focus Fixiform Ds
- 66 Focus Frieze
- 68 Focus Wing
- 69 Square 43
- 70 Dot
- 71 Line

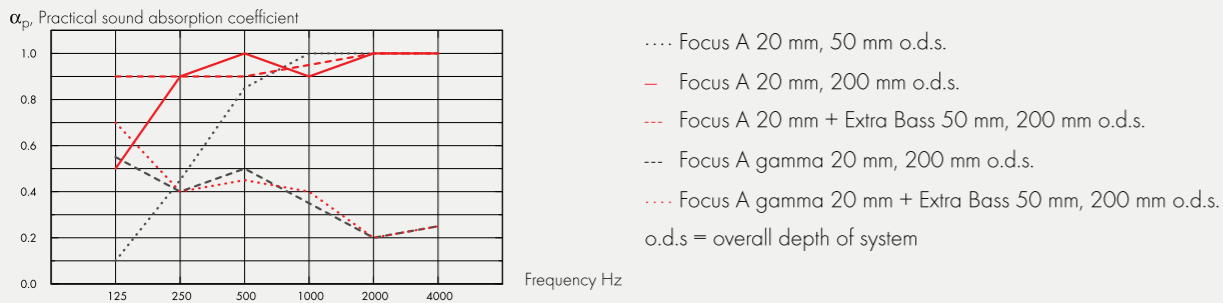


Ecophon Focus™ A

Acoustic:

Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.



	THK mm	o.d.s. mm	α_p , Practical sound absorption coefficient						α_w	Sound absorption class
			125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
-	20	50	0.10	0.45	0.85	1.00	1.00	1.00	0.75	C
-	20	200	0.50	0.90	1.00	0.90	1.00	1.00	1.00	A
+ Extra Bass,	70	200	0.90	0.90	0.90	0.95	1.00	1.00	0.95	A
gamma	20	200	0.55	0.40	0.50	0.35	0.20	0.25	0.30	D
gamma+ Extra Bass	70	200	0.70	0.40	0.45	0.40	0.20	0.25	0.30	D

	THK mm	o.d.s. mm	NRC	SAA
-	20	50	0.85	0.83
+ Extra Bass,	70	200	0.93	0.93
gamma	20	200	0.35	0.36
gamma+ Extra Bass	70	200	0.35	0.37
-	20	400	0.85	0.88

THK mm	AC(1.5) Articulation Class, ASTM E1111, ASTM E1110	D_{nfw} Weighted normalized flanking level difference, ISO 10848-2	CAC dB Ceiling Attenuation Class, ASTM 1414, ASTM E413
20	190	20	21

Indoor Air Quality:

Certificate / Label	
Eurofins Indoor Air Comfort®	IAC
French VOC	A
Finnish M1	•

Environmental Footprint: Focus: 2,6 (Focus family EPD in conformity with ISO 14025 / EN 15804) ,

Circularity: Minimum post-consumer recycled content: 51%, Recyclability: Fully recyclable,

Fire safety: The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. Europe: EN 13501-1, A2-s1,d0,

Humidity Resistance: Class C, relative humidity 95% and 30°C, according to EN 13964:2014

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

Accessibility: The tiles are easily demountable. Minimum demounting depth according to installation diagrams.

Installation: Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification.

System weight: The weight of the system (including suspension grid) should be approximately 3 kg/m².

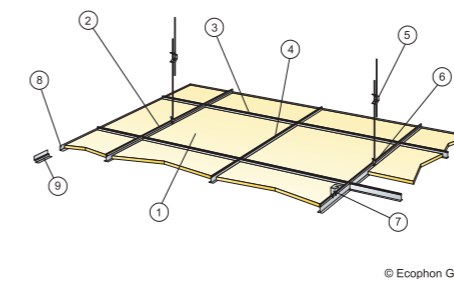
Mechanical properties: See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at www.ecophon.com.

CE: Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

Installation diagram in detail www.ecophon.com

M01

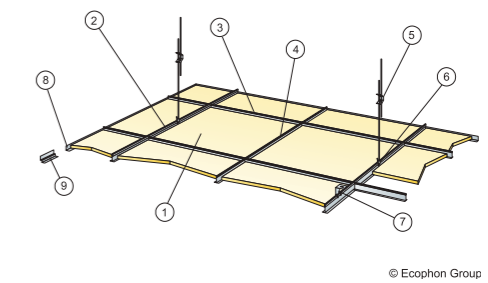
Installation diagram (M01) for Ecophon Focus A



© Ecophon Group

M01 DIN

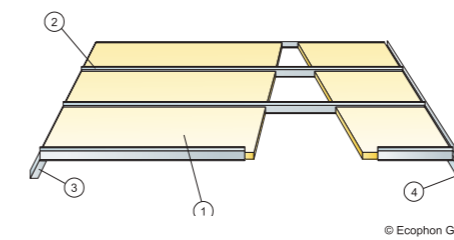
Installation diagram (M01) for Ecophon Focus A



© Ecophon Group

M16

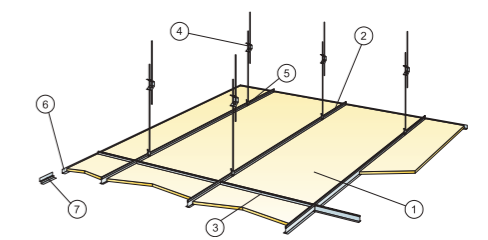
Installation diagram (M16) for Ecophon Focus A XL in corridors



© Ecophon Group

M46

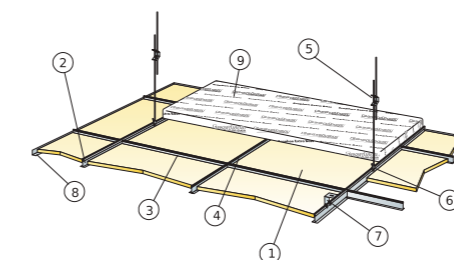
Installation diagram (M46) for Ecophon Focus A XL



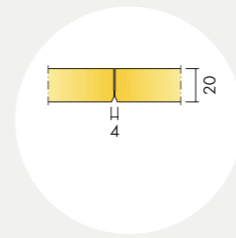
© Ecophon Group

M399

Installation diagram (M399) for Ecophon Focus A



© Ecophon Group



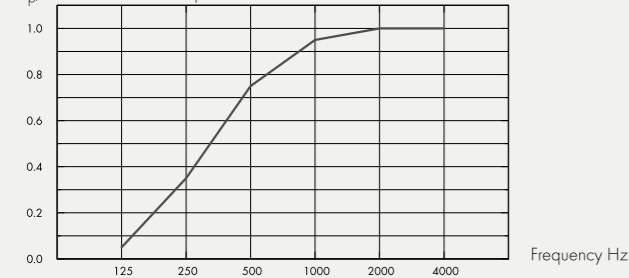
Ecophon Focus™ B

Acoustic:

Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.

α_p , Practical sound absorption coefficient



— Focus B 20 mm, 20 mm o.d.s.
o.d.s = overall depth of system

THK mm	o.d.s. mm	α_p , Practical sound absorption coefficient						α_w	Sound absorption class
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
20	20	0.05	0.35	0.75	0.95	1.00	1.00	0.65	C

THK mm	o.d.s. mm	NRC	SAA
20	20	0.80	0.78

Indoor Air Quality:

Certificate / Label	Value
Eurofins Indoor Air Comfort®	IAC
French VOC	A
Finnish M1	•

Environmental Footprint: Focus: 2,6 (Focus family EPD in conformity with ISO 14025 / EN 15804) ,

Circularity: Minimum post-consumer recycled content: 56%, Recyclability: Fully recyclable,

Fire safety: The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. Europe: EN 13501-1, A2-s1,d0,

Humidity Resistance: Class C, relative humidity 95% and 30°C, according to EN 13964:2014

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

Accessibility: The tiles are not demountable.

Installation: Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification. Rendered surfaces must have sufficient strength to be able to carry the load imposed by the tiles. If doubts, test gluing should be carried out. The surface should always be dry and clean. For best result the surface should be even.

System weight: The weight of the system should be approximately 2,5 kg/m²

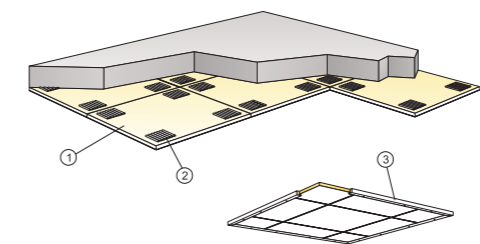
Mechanical properties: Additional live load has to be fixed to the soffit.

CE: Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

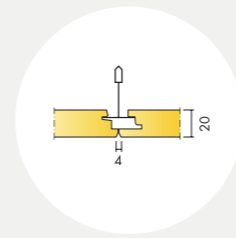
Installation diagram in detail www.ecophon.com

M03

Installation diagram (M03) for Ecophon Focus B, using Connect Absorber glue



© Ecophon Group

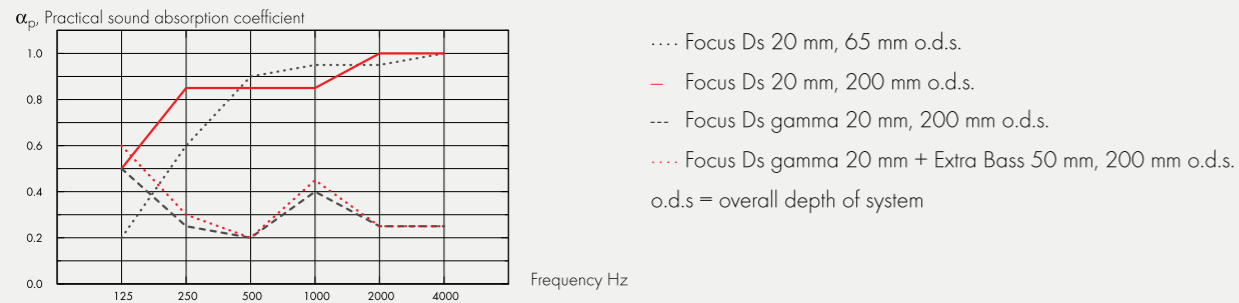


Ecophon Focus™ Ds

Acoustic:

Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.



	THK mm	o.d.s. mm	α_p , Practical sound absorption coefficient						α_w	Sound absorption class
			125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
-	20	65	0.20	0.60	0.90	0.95	0.95	1.00	0.90	A
-	20	200	0.50	0.85	0.85	0.85	1.00	1.00	0.90	A
gamma	20	200	0.50	0.25	0.20	0.40	0.25	0.25	0.25	E
gamma+ Extra Bass	70	200	0.60	0.30	0.20	0.45	0.25	0.25	0.25	E

	THK mm	o.d.s. mm	NRC	SAA
-	20	65	0.90	0.89
gamma	20	200	0.30	0.28
gamma+ Extra Bass	70	200	0.30	0.29
-	20	400	0.80	0.82

THK mm	AC(1.5) Articulation Class, ASTM E1111, ASTM E1110	D_{nfw} Weighted normalized flanking level difference, ISO 10848-2	CAC dB Ceiling Attenuation Class, ASTM 1414, ASTM E413
20	180	24	25

Indoor Air Quality:

Certificate / Label	
Eurofins Indoor Air Comfort®	IAC
French VOC	A
Finnish M1	•

Environmental Footprint: Focus: 2,6 (Focus family EPD in conformity with ISO 14025 / EN 15804) ,

Circularity: Minimum post-consumer recycled content: 57%, Recyclability: Fully recyclable,

Fire safety: The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. Europe: EN 13501-1, A2-s1,d0,

Humidity Resistance: Class C, relative humidity 95% and 30°C, according to EN 13964:2014

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

Accessibility: The tiles in size 600x600 and 1200x600 are easily demountable. The tiles in size 1200x1200 and XL sizes are demountable. Minimum demounting depth according to installation diagrams.

Installation: Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification. The systems are not recommended for small rooms (approximately 2x2 m²). Ceilings with a large amount of integrations require careful planning, design and installation.

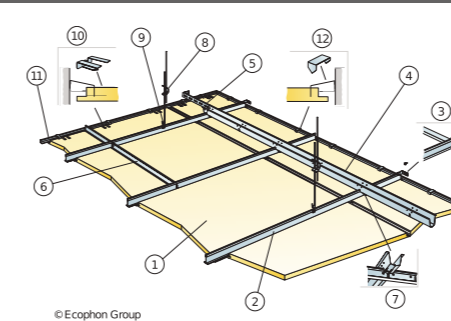
System weight: The weight of the system (including suspension grid) should be approximately 3-4 kg/m².

Mechanical properties: See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at www.ecophon.com.

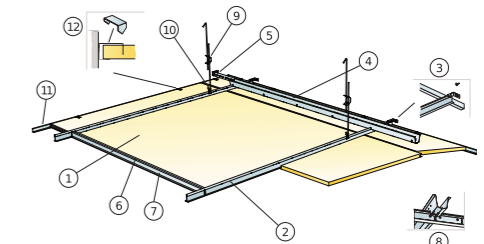
CE: Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

Installation diagram in detail www.ecophon.com

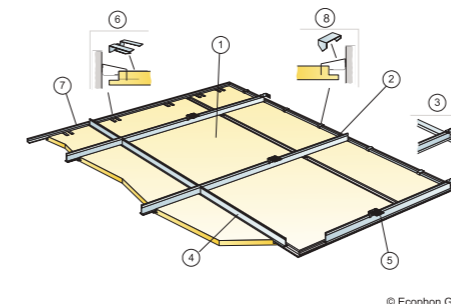
M206
Installation diagram (M206) for Ecophon Focus Ds 600x600, 1200x600 mm and Ecophon Focus Ds XL. Suspended installation



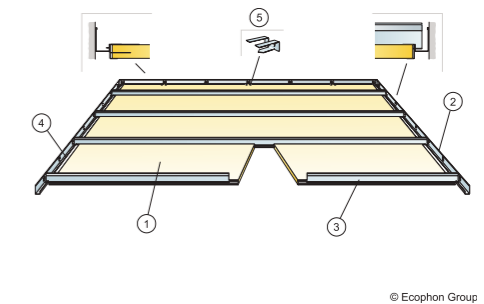
M207
Installation diagram (M207) for Ecophon Focus Ds 1200x1200 mm



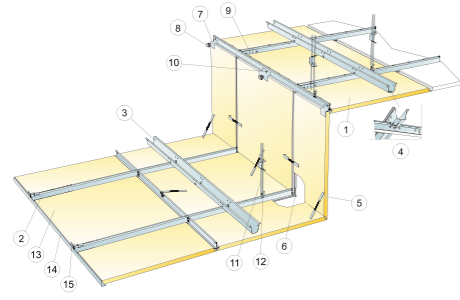
M208
Installation diagram (M208) for Ecophon Focus Ds, direct installation



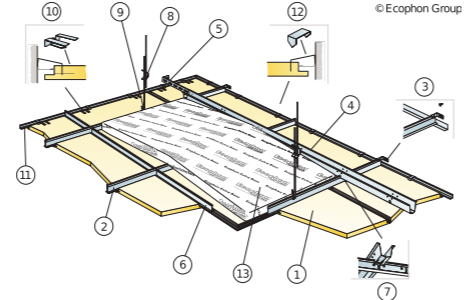
M238
Installation diagram (M238) for Ecophon Focus Ds XL in corridors

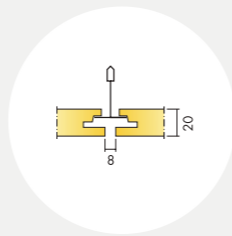


M394
Installation diagram (M394) for Ecophon Focus Ds Levelchange



M400
Installation diagram (M400) for Ecophon Focus Ds



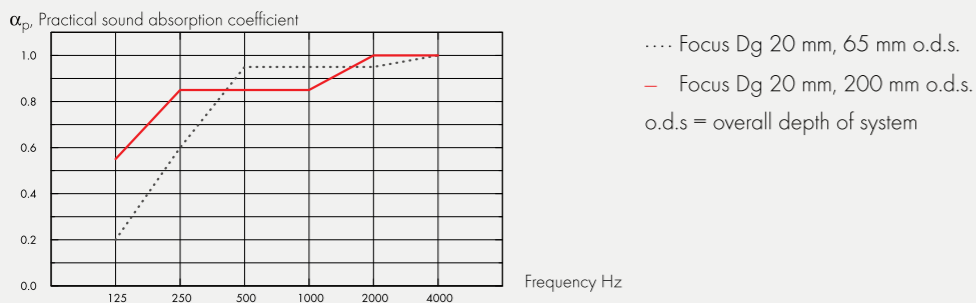


Ecophon Focus™ Dg

Acoustic:

Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.



THK mm	o.d.s. mm	α_p Practical sound absorption coefficient						α_w	Sound absorption class
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
20	65	0.20	0.60	0.95	0.95	0.95	1.00	0.90	A
20	200	0.55	0.85	0.85	0.85	1.00	1.00	0.90	A

THK mm	o.d.s. mm	NRC	SAA
-	20	0.90	0.89
-	20	0.80	0.82

THK mm	Articulation Class, ASTM E1111, ASTM E1110
20	AC(1.5) 180

Indoor Air Quality:

Certificate / Label	
Eurofins Indoor Air Comfort®	IAC
French VOC	A
Finnish M1	•

Environmental Footprint: Focus: 2,6 (Focus family EPD in conformity with ISO 14025 / EN 15804) ,

Circularity: Minimum post-consumer recycled content: 59%, Recyclability: Fully recyclable,

Fire safety: The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. Europe: EN 13501-1, A2-s1,d0,

Humidity Resistance: Class C, relative humidity 95% and 30°C, according to EN 13964:2014

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

Accessibility: The tiles in size 600x600 and 1200x600 are easily demountable. The tiles in size 1200x1200 and XL sizes are demountable. Minimum demounting depth according to installation diagrams.

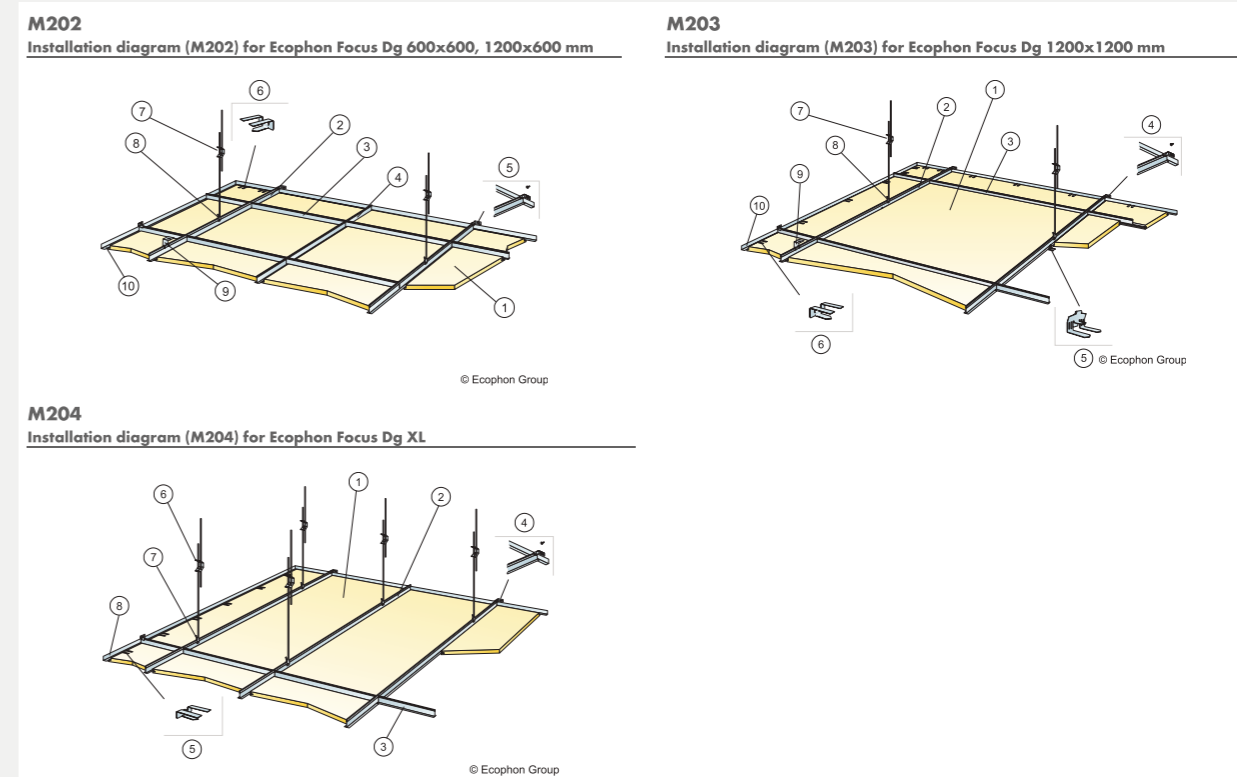
Installation: Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification. The systems are not recommended for small rooms (approximately 2x2 m²). Ceilings with a large amount of integrations require careful planning, design and installation.

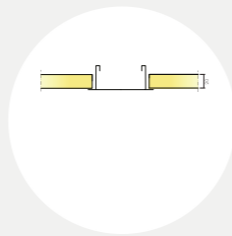
System weight: The weight of the system (including suspension grid) should be approximately 3-4 kg/m².

Mechanical properties: See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at www.ecophon.com.

CE: Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

Installation diagram in detail www.ecophon.com



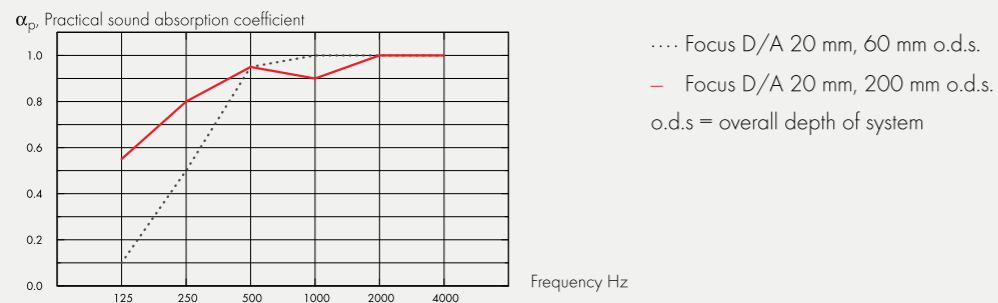


Ecophon Focus™ D/A for Bandraster

Acoustic:

Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.



THK mm	o.d.s. mm	α_p Practical sound absorption coefficient						α_w	Sound absorption class
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
20	60	0.10	0.50	0.95	1.00	1.00	1.00	0.80	A
20	200	0.55	0.80	0.95	0.90	1.00	1.00	0.95	A

	THK mm	o.d.s. mm	NRC	SAA
-	20	60	0.90	0.89
-	20	400	0.80	0.82

THK mm	AC(1.5)		D_{nfw}		CAC dB	
	Articulation Class, ASTM E1111, ASTM E1110		Weighted normalized flanking level difference, ISO 10848-2		Ceiling Attenuation Class, ASTM 1414, ASTM E413	
20	180		24		25	

Indoor Air Quality:

Certificate / Label

French VOC, A •

Circularity: Minimum post-consumer recycled content: 57%, Recyclability: Fully recyclable,

Fire safety: The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. Europe: EN 13501-1, A2-s1,d0,

Humidity Resistance: Class C, relative humidity 95% and 30°C, according to EN 13964:2014

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

Accessibility: The tiles are easily demountable. Minimum demounting depth according to installation diagrams.

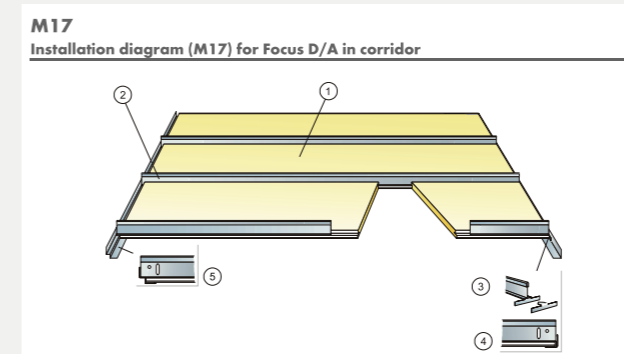
Installation: Installed according to installation diagram and bandraster/grid supplier recommendations.

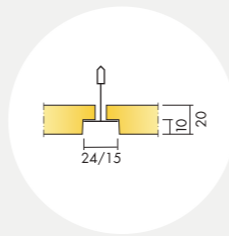
System weight: The weight of the system (including suspension grid) should be approximately 2 kg/m².

Mechanical properties: See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at www.ecophon.com.

CE: Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

Installation diagram in detail www.ecophon.com





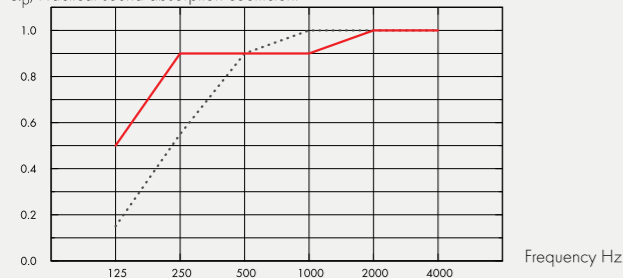
Ecophon Focus™ E

Acoustic:

Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.

α_p , Practical sound absorption coefficient



..... Focus E 20 mm, 60 mm o.d.s.
 — Focus E 20 mm, 200 mm o.d.s.
 o.d.s = overall depth of system

THK mm	o.d.s. mm	α_p , Practical sound absorption coefficient						α_w	Sound absorption class
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
20	60	0.15	0.55	0.90	1.00	1.00	1.00	0.85	B
20	200	0.50	0.90	0.90	0.90	1.00	1.00	0.95	A

THK mm	o.d.s. mm	NRC	SAA
-	20	0.90	0.87
-	20	0.85	0.85

THK mm	AC(1.5)		D_{nfw}		CAC dB	
	Articulation Class, ASTM E1111, ASTM E1110		Weighted normalized flanking level difference, ISO 10848-2		Ceiling Attenuation Class, ASTM 1414, ASTM E413	
20	180		22		23	

Indoor Air Quality:

Certificate / Label	
Eurofins Indoor Air Comfort®	IAC
French VOC	A
Finnish M1	•

Environmental Footprint: Focus: 2,6 (Focus family EPD in conformity with ISO 14025 / EN 15804) ,

Circularity: Minimum post-consumer recycled content: 55%, Recyclability: Fully recyclable,

Fire safety: The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. Europe: EN 13501-1, A2-s1,d0,

Humidity Resistance: Class C, relative humidity 95% and 30°C, according to EN 13964:2014

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

Accessibility: The tiles are easily demountable. Minimum demounting depth according to installation diagrams.

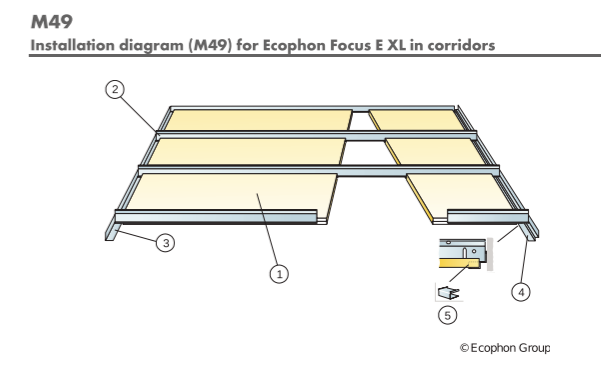
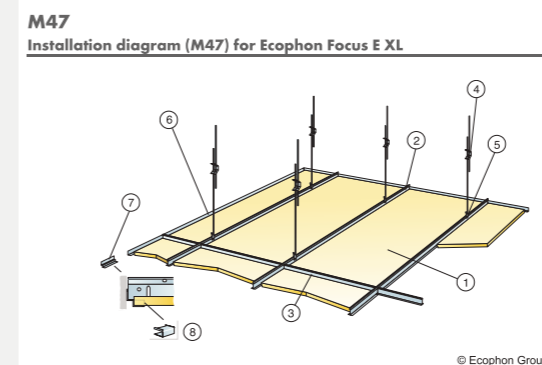
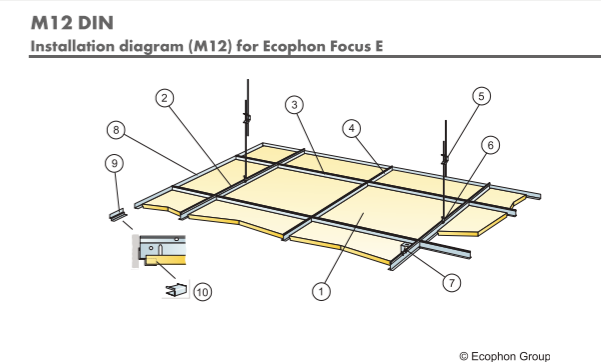
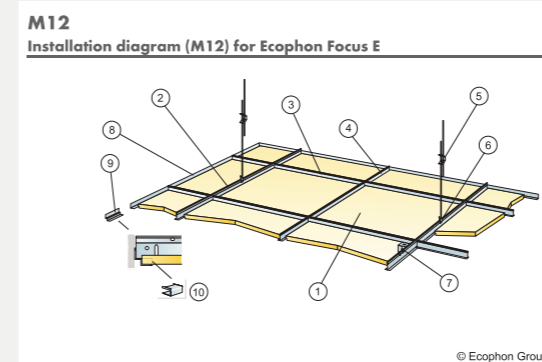
Installation: Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification.

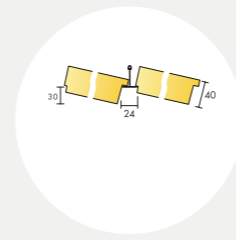
System weight: The weight of the system (including suspension grid) should be approximately 3 kg/m².

Mechanical properties: See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at www.ecophon.com.

CE: Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

Installation diagram in detail www.ecophon.com



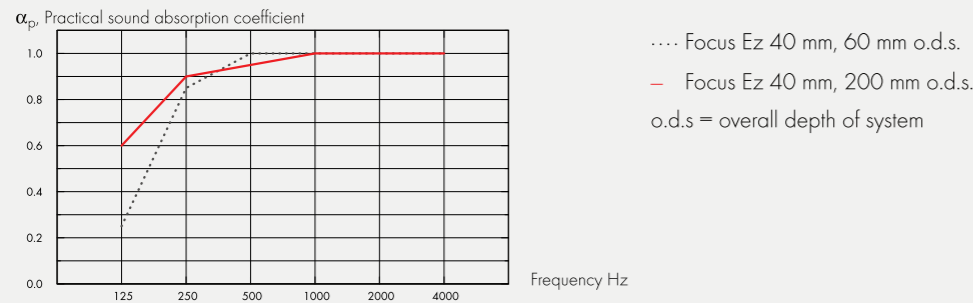


Ecophon Focus™ Ez

Acoustic:

Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.



THK mm	o.d.s. mm	α_p Practical sound absorption coefficient						α_w	Sound absorption class
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
40	60	0.25	0.85	1.00	1.00	1.00	1.00	1.00	A
40	200	0.60	0.90	0.95	1.00	1.00	1.00	1.00	A

	THK mm	o.d.s. mm	NRC	SAA
-	40	60	1.00	0.99
-	40	200	1.00	0.97

THK mm	AC(1.5)		D_{nfw}		CAC dB	
	Articulation Class, ASTM E1111, ASTM E1110		Weighted normalized flanking level difference, ISO 10848-2		Ceiling Attenuation Class, ASTM 1414, ASTM E413	
40	200		29		31	

Indoor Air Quality:

Certificate / Label	
Eurofins Indoor Air Comfort®	IAC
French VOC	A
Finnish M1	•

Circularity: Minimum post-consumer recycled content: 59%, Recyclability: Fully recyclable,

Fire safety: The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. Europe: EN 13501-1, A2-s1,d0,

Humidity Resistance: Class C, relative humidity 95% and 30°C, according to EN 13964:2014

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

Accessibility: The tiles are easily demountable. Minimum demounting depth according to installation diagrams.

Installation: Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification.

System weight: The weight of the system (including suspension grid) should be approximately 5 kg/m²

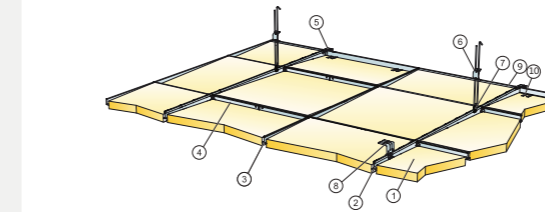
Mechanical properties: See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at www.ecophon.com.

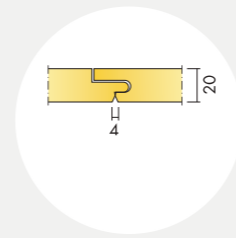
CE: Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

Installation diagram in detail www.ecophon.com

M393

Installation diagram (M393) for Ecophon Focus Ez





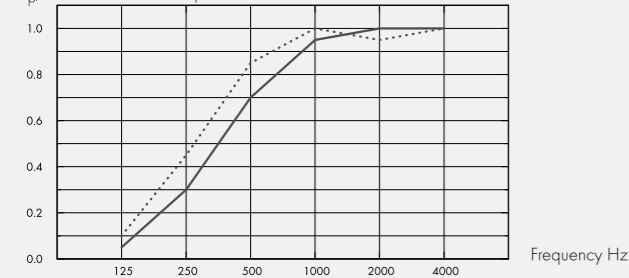
Ecophon Focus™ F

Acoustic:

Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.

α_p , Practical sound absorption coefficient



— Focus F 20 mm, 20 mm o.d.s.
 Focus F 20 mm, 40 mm o.d.s.
 o.d.s = overall depth of system

THK mm	o.d.s. mm	α_p , Practical sound absorption coefficient						α_w	Sound absorption class
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
20	20	0.05	0.30	0.70	0.95	1.00	1.00	0.60	C
20	40	0.10	0.45	0.85	1.00	0.95	1.00	0.75	C

THK mm	o.d.s. mm	NRC	SAA
-	20	0.75	0.77

Indoor Air Quality:

Certificate / Label	Value
Eurofins Indoor Air Comfort®	IAC
French VOC	A
Finnish M1	•

Environmental Footprint: Focus: 2,6 (Focus family EPD in conformity with ISO 14025 / EN 15804) ,

Circularity: Minimum post-consumer recycled content: 59%, Recyclability: Fully recyclable,

Fire safety: The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. Europe: EN 13501-1, A2-s1,d0,

Humidity Resistance: Class C, relative humidity 95% and 30°C, according to EN 13964:2014

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

Accessibility: The tiles are not demountable.

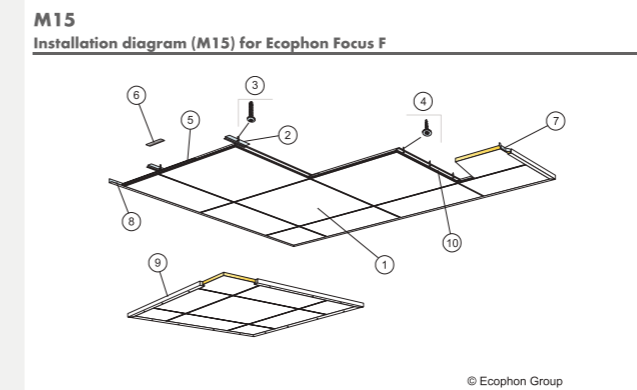
Installation: Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification. For best result the surface should be even, however an acceptable result could be achieved on slightly uneven surfaces. If very uneven surfaces - installation of furring (evenly spaced timber battens) as the substrate for the tiles is recommended.

System weight: The weight of the system should be approximately 2,5 kg/m²

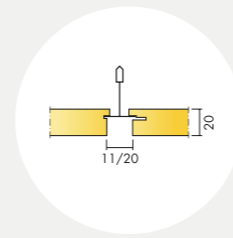
Mechanical properties: Additional live load has to be fixed to the soffit.

CE: Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

Installation diagram in detail www.ecophon.com



© Ecophon Group

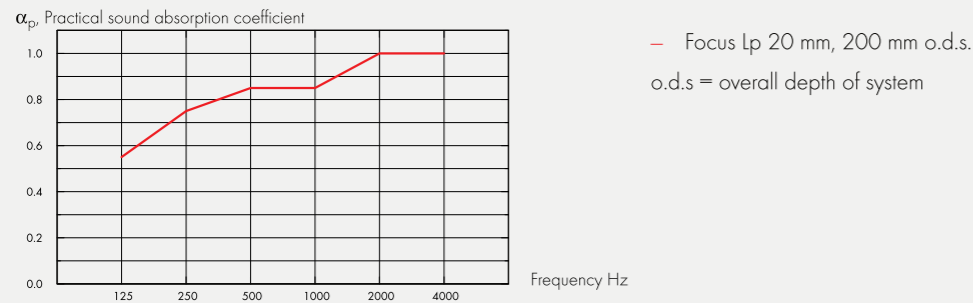


Ecophon Focus™ Lp

Acoustic:

Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.



THK mm	o.d.s. mm	α_p Practical sound absorption coefficient						α_w	Sound absorption class
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
20	200	0.55	0.75	0.85	0.85	1.00	1.00	0.90	A

THK mm	o.d.s. mm	NRC	SAA
20	400	0.80	0.82

THK mm	AC(1.5) Articulation Class, ASTM E1111, ASTM E1110	D_{nfw} Weighted normalized flanking level difference, ISO 10848-2	CAC dB Ceiling Attenuation Class, ASTM 1414, ASTM E413
20	180	24	25

Indoor Air Quality:

Certificate / Label	
Eurofins Indoor Air Comfort®	IAC
French VOC	A
Finnish M1	•

Environmental Footprint: Focus: 2,6 (Focus family EPD in conformity with ISO 14025 / EN 15804) ,

Circularity: Minimum post-consumer recycled content: 57%, Recyclability: Fully recyclable,

Fire safety: The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. Europe: EN 13501-1, A2-s1,d0,

Humidity Resistance: Class C, relative humidity 95% and 30°C, according to EN 13964:2014

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

Accessibility: The tiles are easily demountable. Minimum demounting depth according to installation diagrams.

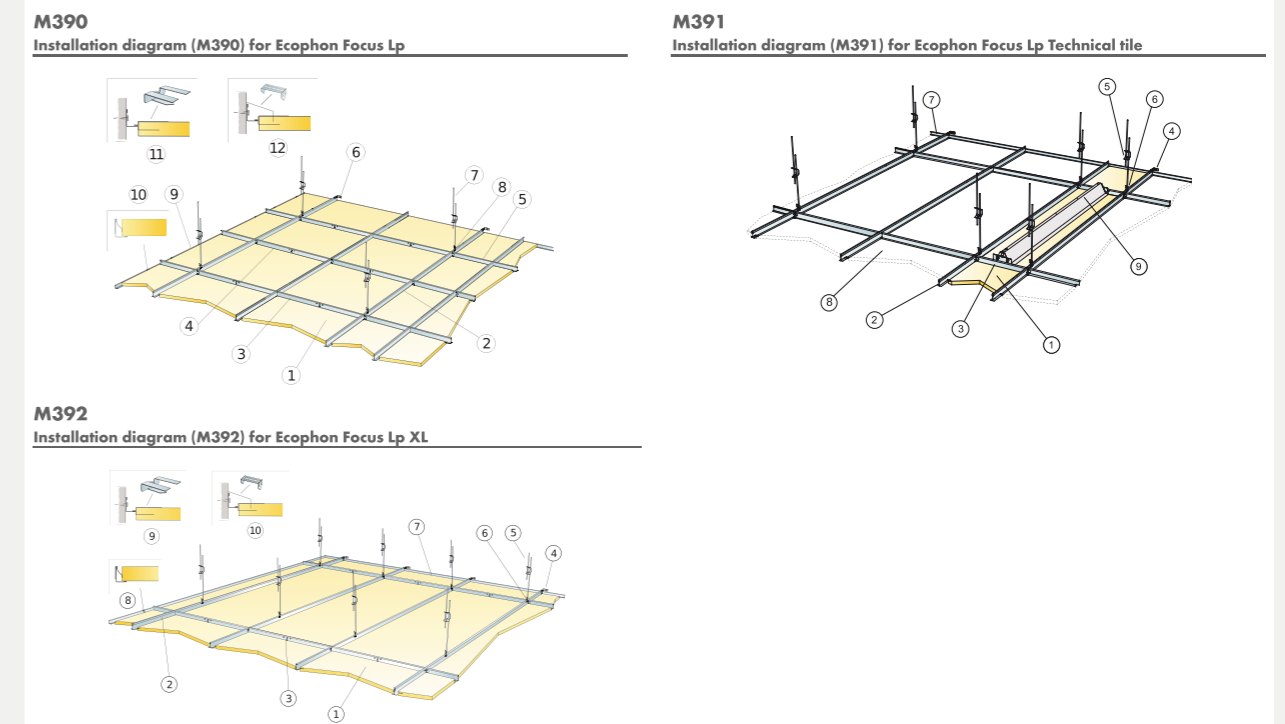
Installation: Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification. The systems are not recommended for small rooms (approximately 2x2 m²). Ceilings with a large amount of integrations require careful planning, design and installation.

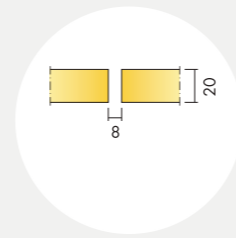
System weight: The weight of the system (including suspension grid) should be approximately 3-4 kg/m².

Mechanical properties: See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at www.ecophon.com. For the Technical tiles installed according to M391 there is a load bearing capacity of 100 N for each Main runner per 1200 mm. This gives a total load bearing capacity of 200 N for a load evenly distributed on two Main runners.

CE: Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

Installation diagram in detail www.ecophon.com





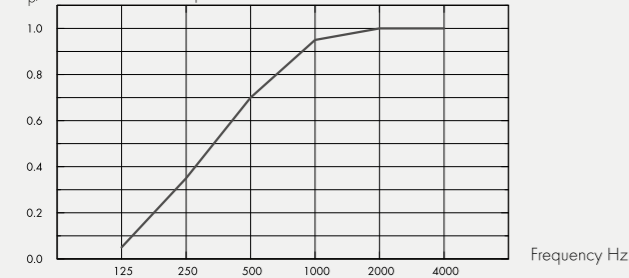
Ecophon Focus™ SQ

Acoustic:

Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.

α_p , Practical sound absorption coefficient



— Focus SQ 20 mm, 20 mm o.d.s.
o.d.s = overall depth of system

THK mm	o.d.s. mm	α_p , Practical sound absorption coefficient						α_w	Sound absorption class
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
20	20	0.05	0.35	0.70	0.95	1.00	1.00	0.65	C

THK mm	AC(1.5)
20	190

Articulation Class, ASTM E1111, ASTM E1110

Indoor Air Quality:

Certificate / Label	
Eurofins Indoor Air Comfort®	IAC
French VOC	A
Finnish M1	•

Environmental Footprint: Focus: 2,6 (Focus family EPD in conformity with ISO 14025 / EN 15804) ,

Circularity: Minimum post-consumer recycled content: 57%, Recyclability: Fully recyclable,

Fire safety: The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. Europe: EN 13501-1, A2-s1,d0,

Humidity Resistance: Class C, relative humidity 95% and 30°C, according to EN 13964:2014

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

Accessibility: The tiles are not demountable.

Installation: Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification. Rendered surfaces must have sufficient strength to be able to carry the load imposed by the tiles. If doubts, test gluing should be carried out. The surface should always be dry and clean. For best result the surface should be even, however an acceptable result could be achieved on slightly uneven surfaces.

System weight: The weight of the system should be approximately 2,5 kg/m²

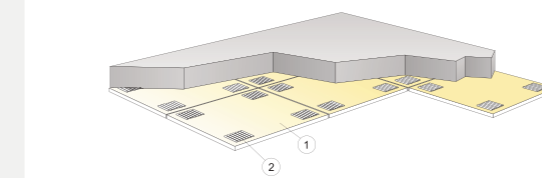
Mechanical properties: Additional live load has to be fixed to the soffit.

CE: Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

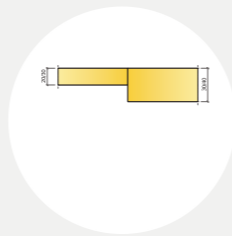
Installation diagram in detail www.ecophon.com

M107

Installation diagram (M107) for Ecophon Focus SQ, using Connect Absorber glue



© Ecophon Group

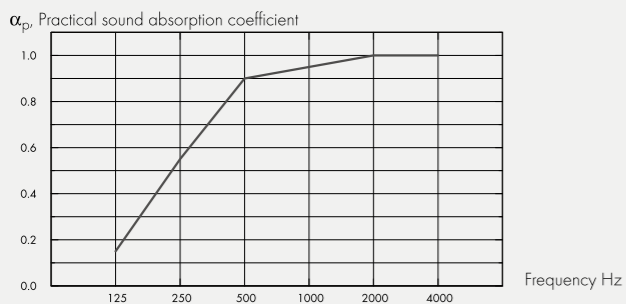
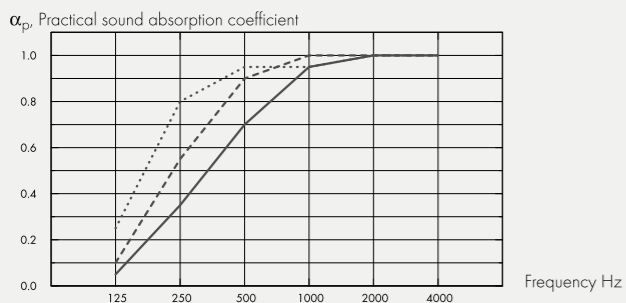


Ecophon Focus™ Levels

Acoustic:

Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.



THK mm	o.d.s. mm	α_p , Practical sound absorption coefficient						α_w	Sound absorption class
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
40	43	0.25	0.80	0.95	0.95	1.00	1.00	1.00	A
30	33	0.10	0.55	0.90	1.00	1.00	1.00	0.85	B
20	23	0.05	0.35	0.70	0.95	1.00	1.00	0.65	C
0	43	0.15	0.55	0.90	0.95	1.00	1.00	0.85	B

Indoor Air Quality:

Certificate / Label	
Eurofins Indoor Air Comfort®	IAC
French VOC	A
Finnish M1	•

Environmental Footprint: Focus Levels 20mm: 5,03 (Focus Levels family EPD in conformity with ISO 14025 / EN 15804) , Focus Levels 30mm: 6,23 (Focus Levels family EPD in conformity with ISO 14025 / EN 15804) , Focus Levels 40mm: 7,44 (Focus Levels family EPD in conformity with ISO 14025 / EN 15804) ,

Circularity: Minimum post-consumer recycled content (20 mm): 58%, Minimum post-consumer recycled content (30 mm): 62%, Minimum post-consumer recycled content (40 mm): 64%, Recyclability: Fully recyclable,

Fire safety: The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. Europe: EN 13501-1, A2-s1,d0,

Humidity Resistance: Class C, relative humidity 95% and 30°C, according to EN 13964:2014

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

Accessibility: The tiles are not demountable.

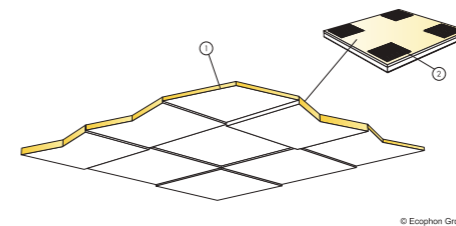
Installation: Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification. Rendered surfaces must have sufficient strength to be able to carry the load imposed by the tiles. If doubts, test gluing should be carried out. The surface should always be dry and clean. For best result the surface should be even, however an acceptable result could be achieved on slightly uneven surfaces.

Mechanical properties: Additional live load has to be fixed to the soffit.

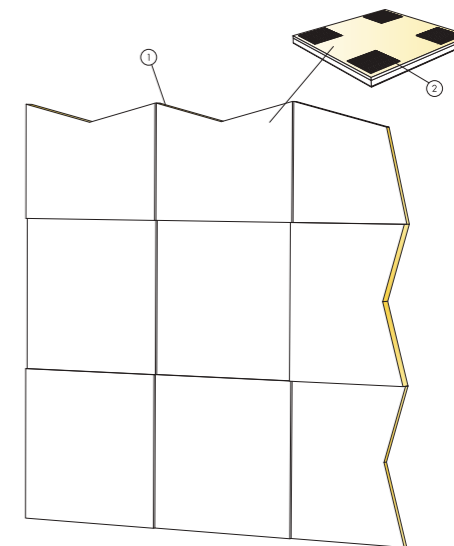
CE: Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

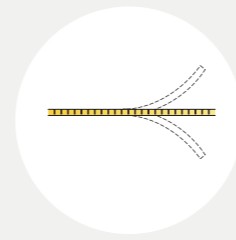
Installation diagram in detail www.ecophon.com

M488
Installation diagram (M488) for Ecophon Focus Levels, using Connect Absorber glue



M489
Installation diagram (M489) for Ecophon Focus Levels, using Connect Absorber glue



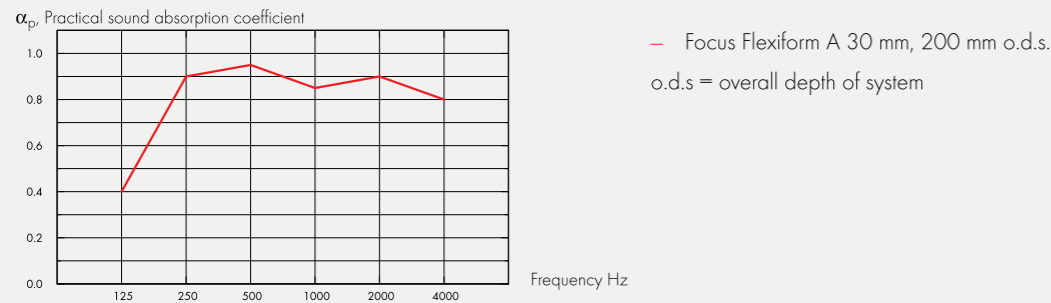


Ecophon Focus™ Flexiform A

Acoustic: Acoustic values corresponding to a flat ceiling.

Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.



THK mm	o.d.s. mm	α_p Practical sound absorption coefficient						α_w	Sound absorption class
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
30	200	0.40	0.90	0.95	0.85	0.90	0.80	0.90	A

THK mm	D_{nfw}		CAC dB
	Weighted normalized flanking level difference, ISO 10848-2		
20	24		25

Indoor Air Quality:

Certificate / Label	
Eurofins Indoor Air Comfort®	IAC
French VOC	A
Finnish M1	•

Environmental Footprint: Focus Flexiform A: 3,1 (Focus family EPD in conformity with ISO 14025 / EN 15804) ,

Circularity: Minimum post-consumer recycled content: 39%, Recyclability: Fully recyclable,

Fire safety: The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. Europe: EN 13501-1, A2-s1,d0,

Humidity Resistance: Class C, relative humidity 95% and 30°C, according to EN 13964:2014

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

Accessibility: The tiles are not demountable.

Installation: Installed according to installation diagrams, installation guides and drawing aid. (Please note: Extreme incident light, near windows or other light sources, can create undesired shadow effects on the structured surface on curved installations.)

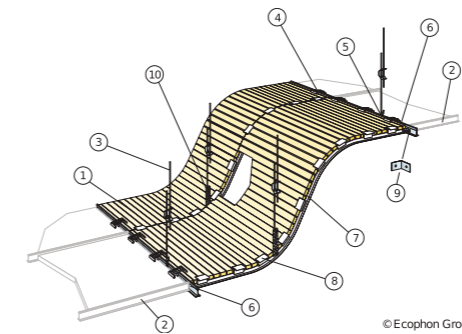
System weight: The weight is approximately 3 kg/m², depending on the installation method.

Mechanical properties: Additional live load has to be fixed to the soffit.

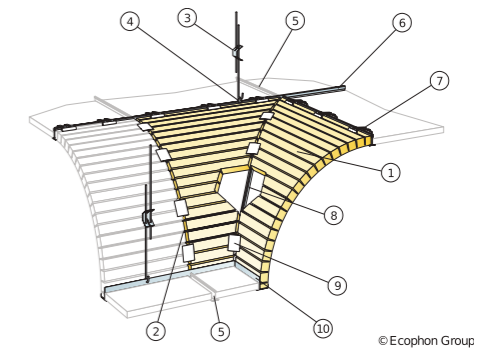
CE: Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

Installation diagram in detail www.ecophon.com

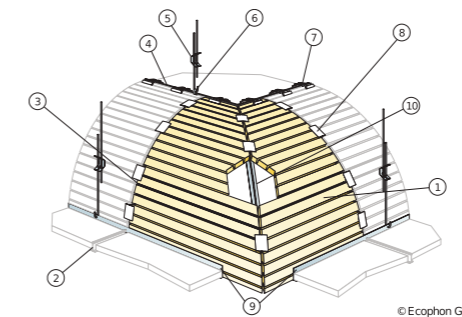
M31
Installation diagram (M31) for Ecophon Focus Flexiform A

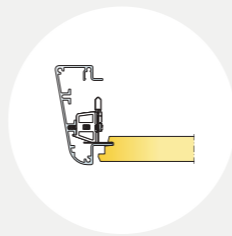


M31ec
Installation diagram (M31EC) for Ecophon Focus Flexiform A external corner



M31ic
Installation diagram (M31IC) for Ecophon Focus Flexiform A internal corner





Ecophon Focus Edge™ 500

Acoustic: Ecophon Focus Edge 500 is a perimeter component. For acoustic data on the system - please see corresponding ceiling system (Focus Ds, Focus Dg or Focus/Master E).

Circularity: Fully recyclable.

Fire safety: Europe: EN 13501-1, A1,

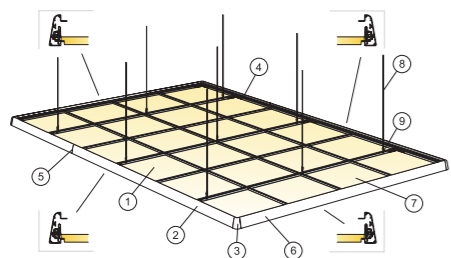
Installation: Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification.

Mechanical properties: Additional live load has to be fixed to the soffit.

CE: Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

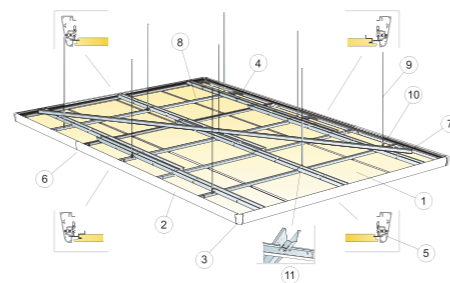
Installation diagram in detail www.ecophon.com

M165
Installation diagram (M165) for Ecophon Edge 500 with Focus E T24

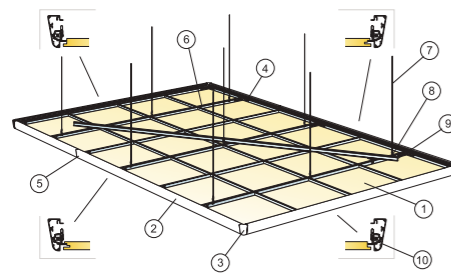


© Ecophon Group

M210
Installation diagram (M210) for Ecophon Edge 500 with Focus Ds

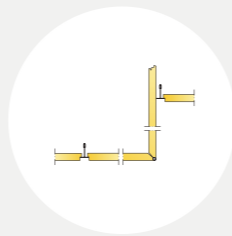


M211
Installation diagram (M211) for Ecophon Edge 500 with Focus Dg



© Ecophon Group



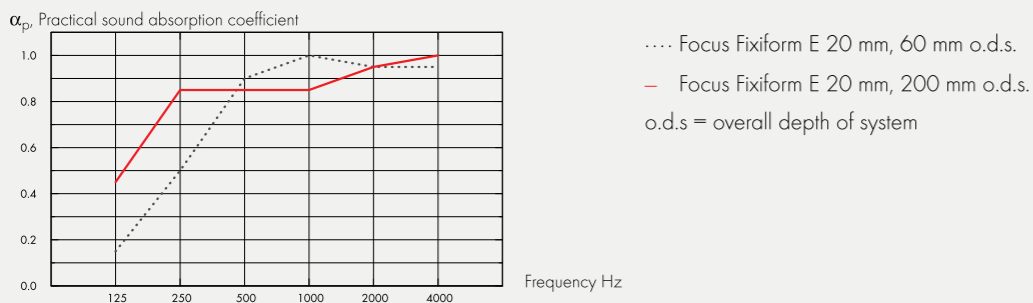


Ecophon Focus™ Fixiform E

Acoustic: Acoustic values corresponding to a flat ceiling.

Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.



THK mm	o.d.s. mm	α_p Practical sound absorption coefficient						α_w	Sound absorption class
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
20	60	0.15	0.50	0.90	1.00	0.95	0.95	0.80	B
20	200	0.45	0.85	0.85	0.85	0.95	1.00	0.90	A

THK mm	D_{nfw}		CAC dB	
	Weighted normalized flanking level difference, ISO 10848-2		Ceiling Attenuation Class, ASTM 1414, ASTM E413	
20	24		25	

Indoor Air Quality:

Certificate / Label	
Eurofins Indoor Air Comfort®	IAC
French VOC	A
Finnish M1	•

Circularity: Minimum post-consumer recycled content: 57%, Recyclability: Fully recyclable,

Fire safety: The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. Europe: EN 13501-1, A2-s1,d0,

Humidity Resistance: Class C, relative humidity 95% and 30°C, according to EN 13964:2014

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

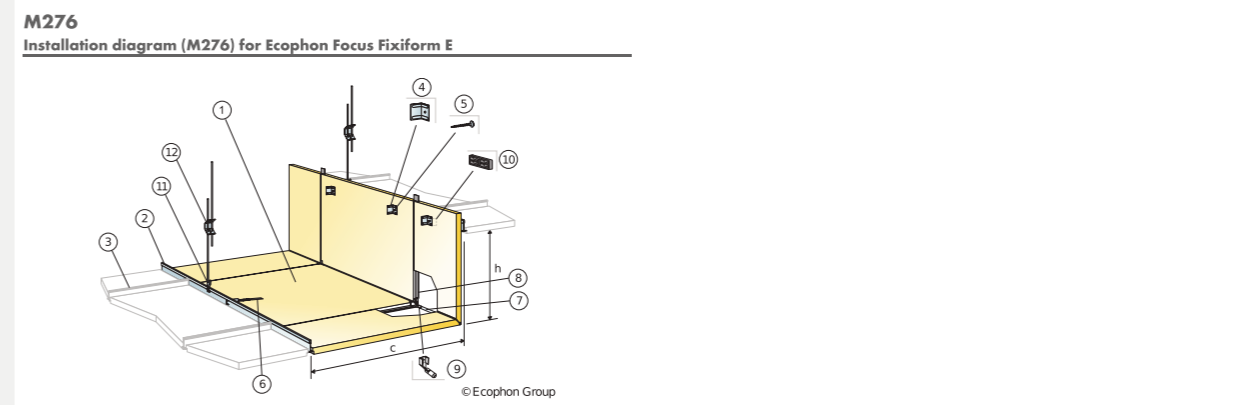
Accessibility: The panels are demountable via adjacent flat ceiling tiles.

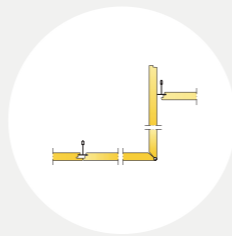
Installation: Installed according to installation diagrams, installation guides and drawing aid. Focus Fixiform E is supplied with all necessary installation accessories.

Mechanical properties: Additional live load has to be fixed to the soffit.

CE: Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

Installation diagram in detail www.ecophon.com



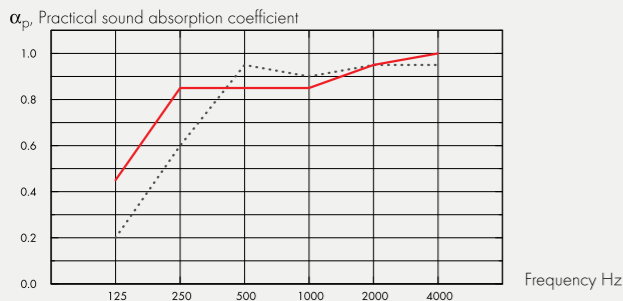


Ecophon Focus™ Fixiform Ds

Acoustic: Acoustic values corresponding to a flat ceiling.

Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654.



..... Focus Fixiform Ds 20 mm, 75 mm o.d.s.
 — Focus Fixiform Ds 20 mm, 200 mm o.d.s.
 o.d.s = overall depth of system

THK mm	o.d.s. mm	α _p Practical sound absorption coefficient						α _w	Sound absorption class
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
20	75	0.20	0.60	0.95	0.90	0.95	0.95	0.90	A
20	200	0.45	0.85	0.85	0.85	0.95	1.00	0.90	A

THK mm	D _{ntw}		CAC dB	
	Weighted normalized flanking level difference, ISO 10848-2		Ceiling Attenuation Class, ASTM 1414, ASTM E413	
20	24		25	

Indoor Air Quality:

Certificate / Label	
Eurofins Indoor Air Comfort®	IAC
French VOC	A
Finnish M1	•

Circularity: Minimum post-consumer recycled content: 57%, Recyclability: Fully recyclable,

Fire safety: The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. Europe: EN 13501-1, A2-s1,d0,

Humidity Resistance: Class C, relative humidity 95% and 30°C, according to EN 13964:2014

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

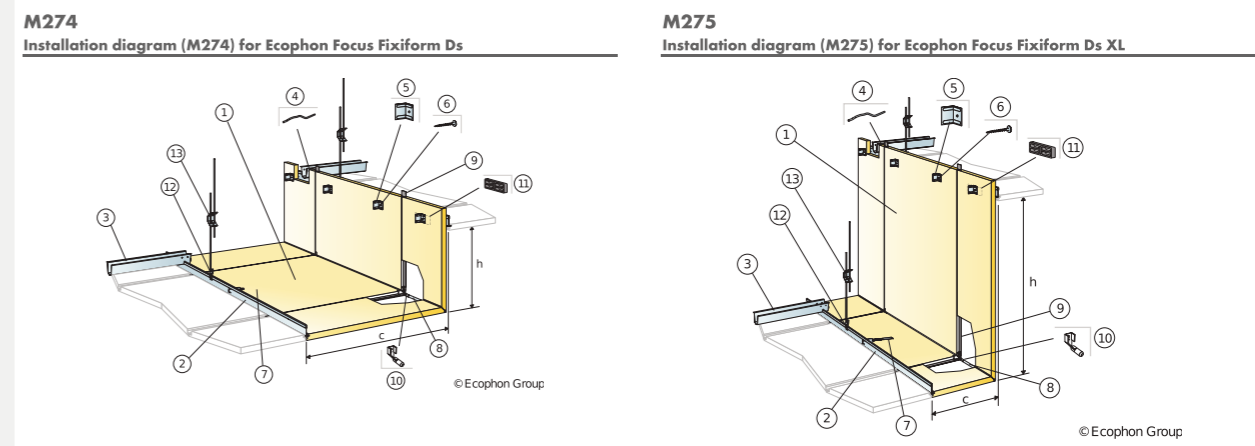
Accessibility: The panels are demountable via adjacent flat ceiling tiles.

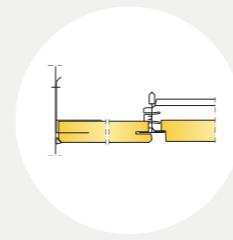
Installation: Installed according to installation diagrams, installation guides and drawing aid. Focus Fixiform Ds is supplied with all necessary installation accessories.

Mechanical properties: Additional live load has to be fixed to the soffit.

CE: Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

Installation diagram in detail www.ecophon.com



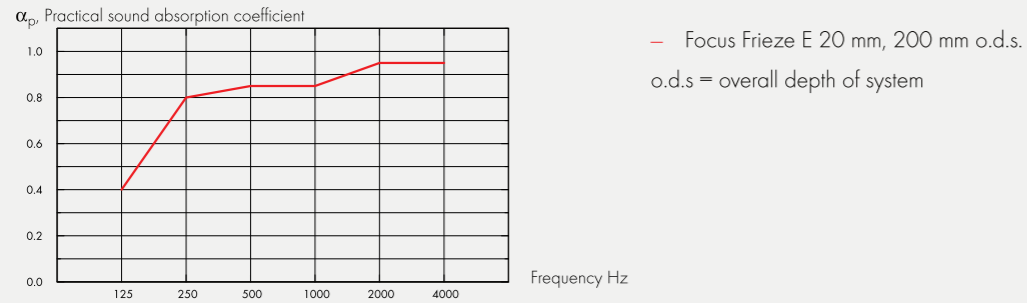


Ecophon Focus™ Frieze

Acoustic:

Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.



THK mm	o.d.s. mm	α_p Practical sound absorption coefficient						α_w	Sound absorption class
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
20	200	0.40	0.80	0.85	0.85	0.95	0.95	0.90	A

THK mm	AC(1.5) Articulation Class, ASTM E1111, ASTM E1110	D_{ntw} Weighted normalized flanking level difference, ISO 10848-2	CAC dB Ceiling Attenuation Class, ASTM 1414, ASTM E413
20	190	24	25

Indoor Air Quality:

Certificate / Label	
Eurofins Indoor Air Comfort®	IAC
French VOC	A
Finnish M1	•

Circularity: Minimum post-consumer recycled content: 59%, Recyclability: Fully recyclable,

Fire safety: The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. Europe: EN 13501-1, A2-s1,d0,

Humidity Resistance: Class C, relative humidity 95% and 30°C, according to EN 13964:2014

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

Accessibility: The tiles are not demountable.

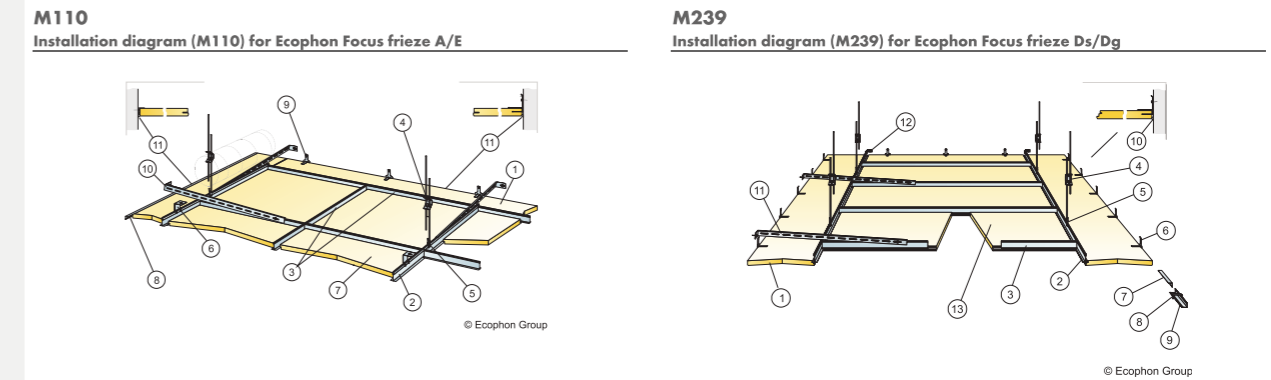
Installation: Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification.

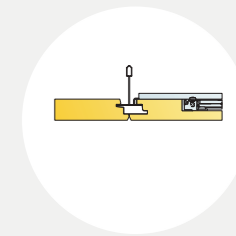
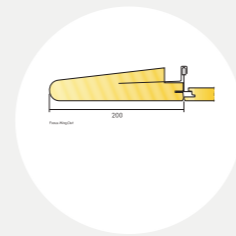
System weight: The system consists of Ecophon Focus™ frieze tiles and Connect™ grid systems, with an approximate weight of 3 kg/m².

Mechanical properties: See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at www.ecophon.com.

CE: Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

Installation diagram in detail www.ecophon.com





Ecophon Focus™ Wing

Acoustic: Ecophon Focus Wing is a perimeter component. As such it is absorbent, however, for acoustic data on the system - please see corresponding ceiling system (Focus Ds or Focus/Master E).

Indoor Air Quality:

Certificate / Label
Eurofins Indoor Air Comfort® IAC Gold
French VOC A+

Circularity: Minimum post-consumer recycled content: 61%, Recyclability: Fully recyclable,

Fire safety: The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. Europe: EN 13501-1, A2-s1,d0,

Humidity Resistance: Class C, relative humidity 95% and 30°C, according to EN 13964:2014

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

Accessibility: The tiles are not demountable.

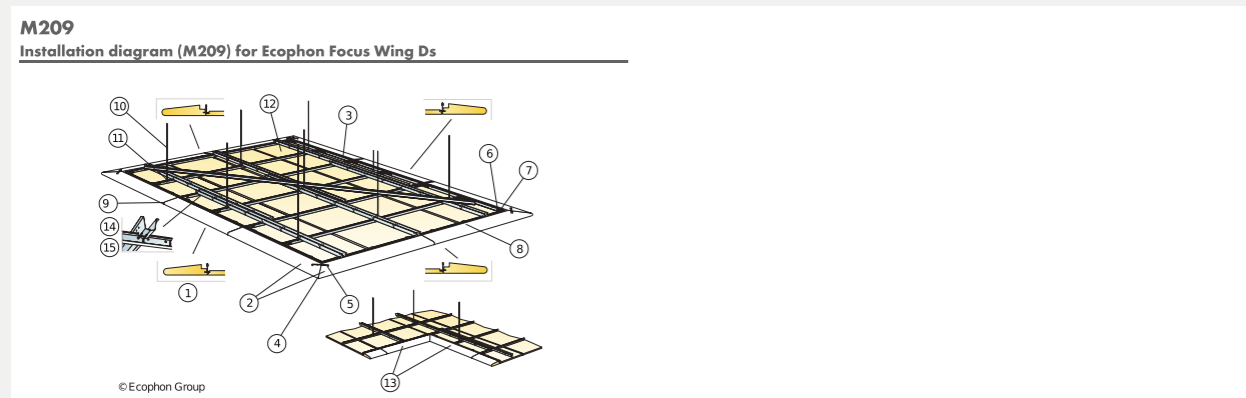
Installation: Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification.

System weight: The systems consist of Ecophon Focus™ Wing elements and Connect™ grid systems, with an approximate weight of 1 kg/m.

Mechanical properties: No additional live load is allowed.

CE: Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

Installation diagram in detail www.ecophon.com



Ecophon Square 43™

Lighting performance:

System effect: 27 W Light source: LED 24,5 W Luminous flux Square Dg, Ds, E: 3281 lm Luminous flux Square Eg, Ez: 2898 lm Light efficiency Square Dg, Ds, E: 121,4 lm/W Light efficiency Square Dg, Ds, E: 108 lm/W Colour temperature: 4000K Color rendering index: Ra ≥80 Colour tolerance: MacAdam ≤3 SDCM Light output ratio (LOR): 100% Light distribution up/down: 0/100 Expected lifespan: L90 >50 000 h Expected lifespan: L70 >100 000 h

Connection: The standard on/off electronic HF ballast delivered with 2,5 meters of cable 3x0,75 mm² and Euro plugg. The SwitchDIM/DALI delivered without cable.

Electrical data: 220-240 V, 50-60 Hz, power factor cos φ>0,98. Electronic HF ballast or electronic HF dim ballast for digital regulation. Light source: led module of 27W total.

Electrical approvals: IP20, Class 1.

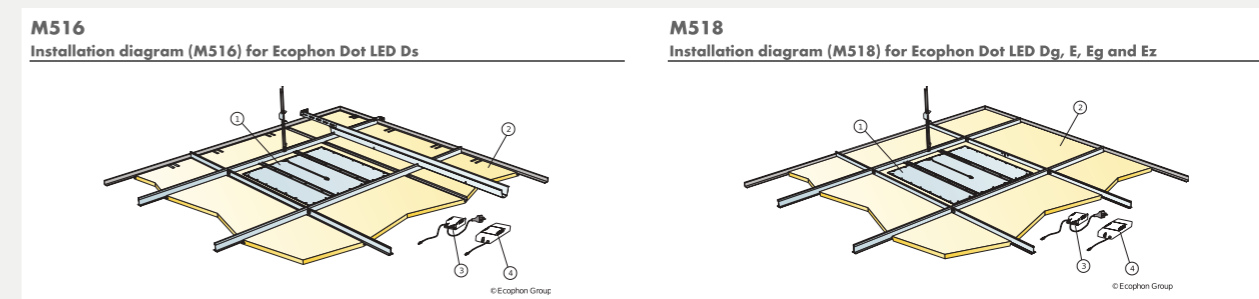
Visual appearance: Tile surface finish; White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

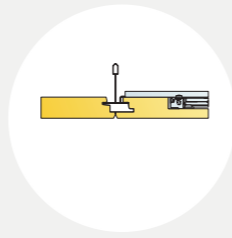
Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

Accessibility: The tiles are easily demountable. Minimum demounting depth according to installation diagrams.

Installation: Installed according to system range which include information regarding minimum overall depth of system. The tile with luminaire housing rests on the T-profiles and the SwitchDIM/DALI and standard on/off ballasts are fastened to the grid or tile next to the luminaire with velcro. Once the tile with luminaire and ballast are in place a certified installation electrician must connect the wiring to sockets or to the next luminaire.

Installation diagram in detail www.ecophon.com





Ecophon Dot™

Lighting performance:

System effect: 27 W Light source: LED 24,5 W Luminous flux Dot Dg, Ds, E: 2936 lm Luminous flux Dot Eg, Ez: 2635 lm Light efficiency Dot Dg, Ds, E: 108,7 lm/W Light efficiency Dot Eg, Ez: 99 lm/W Colour temperature: 4000K Color rendering index: Ra ≥80 Colour tolerance: MacAdam ≤3 SDCM Light output ratio (LOR): 100% Light distribution up/down: 0/100 Expected lifespan: L90 >50 000 h Expected lifespan: L70 >100 000 h

Connection: The standard on/off electronic HF ballast delivered with 2,5 meters of cable 3x0,75 mm² and Euro plugg. The SwitchDIM/DALI delivered without cable.

Electrical data: 220-240 V, 50-60 Hz, power factor cos φ>0,98. Electronic HF ballast or electronic HF dim ballast for digital regulation. Light source: led module of 27W total.

Electrical approvals: IP20, Class 1.

Visual appearance: Tile surface finish; White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

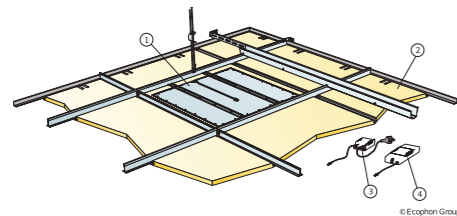
Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

Accessibility: The tiles are easily demountable. Minimum demounting depth according to installation diagrams.

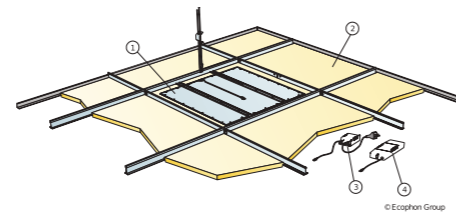
Installation: Installed according to system range which include information regarding minimum overall depth of system. The tile with luminaire housing rests on the T-profiles and the SwitchDIM/DALI and standard on/off ballasts are fastened to the grid or tile next to the luminaire with velcro. Once the tile with luminaire and ballast are in place a certified installation electrician must connect the wiring to sockets or to the next luminaire.

Installation diagram in detail www.ecophon.com

M516
Installation diagram (M516) for Ecophon Dot LED Ds



M518
Installation diagram (M518) for Ecophon Dot LED Dg, E, Eg and Ez



Az Ecophon a munkateljesítmény, a közérzet és az életminőség javítását elősegítő, beltéri akusztikai környezetekhez szükséges megoldások vezető szállítója.

Munkánk alapelveiben svéd hagyományainkat követjük, amely humán megközelítést alkalmaz és közös felelősséget vállal az emberek életminőségéért és a természetes jövőbeli kihívások leküzdéséért. Az Ecophon része a Saint-Gobain csoportnak, amely a fenntartható lakókörnyezeti megoldások egyik nemzetközi éllovasa. Ezen megoldások segítenek egyensúlyba hozni a kényelem és a költséghatékonyság iránti igényeket az energiahatékonysággal és a környezetvédelmi felelősségvállalással.



- making the world a better home.



Ecophon[®]
SAINT-GOBAIN

A SOUND EFFECT ON PEOPLE