BRAMAC ROOFTILING

User Manual

eptar

BMI BRAMAC

Software and library development:

ÉPTÁR Kft.
1145 Budapest
Szugló u. 61-63.
tel.: +36-1 225-7355
www.eptar.hu
info@eptar.hu

Bramac Rooftiling – User Manual

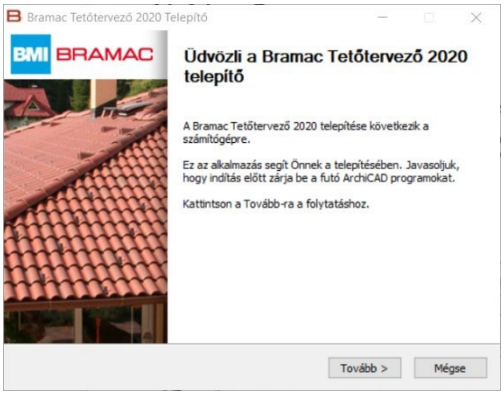
1st edition.

Trademarks:
Archicad® is a registered trademark of Graphisoft® , GDL is a trademark of Graphisoft® .

Contents

Chapter 1

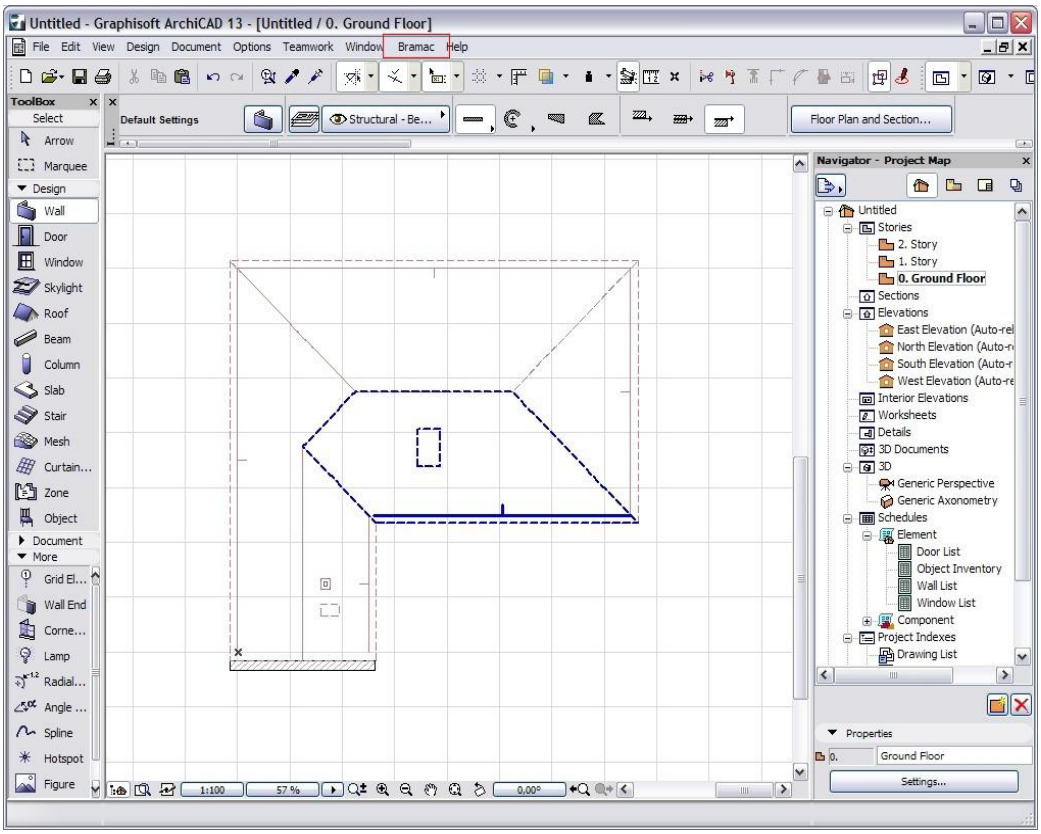
Getting Started



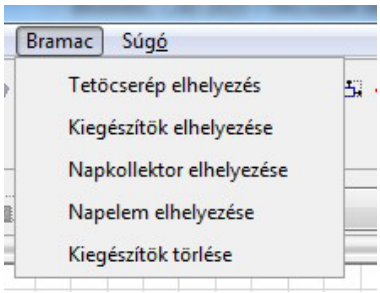
1.1 Installing the Bramac Rooftiling

A Bramac Rooftiling 2026 is compatible with Archicad 23 és and 29 versions.
To install the program, select the version matching your Archicad software, then launch the installer and follow the instructions.

After installation, start the Archicad program. A new menu will appear: ***Bramac***



This menu contains the following items:



The operations accessible through these menu items are described in detail in the next chapter.

1.2 Components of the Bramac Rooftiling

A Bramac Rooftiling application consists of two main components:


Archicad add-on (API) program


és library (BramacTmp.lib)

Both are located in the ***Add-ons*** folder of the Archicad directory, in the ***Bramac*** subfolder. The library is loaded automatically, as the program takes care of it.
The program attaches custom-developed library elements to the roof surfaces selected on the plan and parameterizes them. Essentially two different library elements are placed on the floor plan: a tile element and a ridge tile element. The tile surface is visible as a texture. In a later step, various accessories (snow guards, ventilation tiles, antenna outlets, etc.) and solar roof systems can be assigned to this element. These are usually shown symbolically on the floor plan and schematically in 3D-.
The library contains, among other things, the image files required for textures and the database used for listing.

Chapter 2

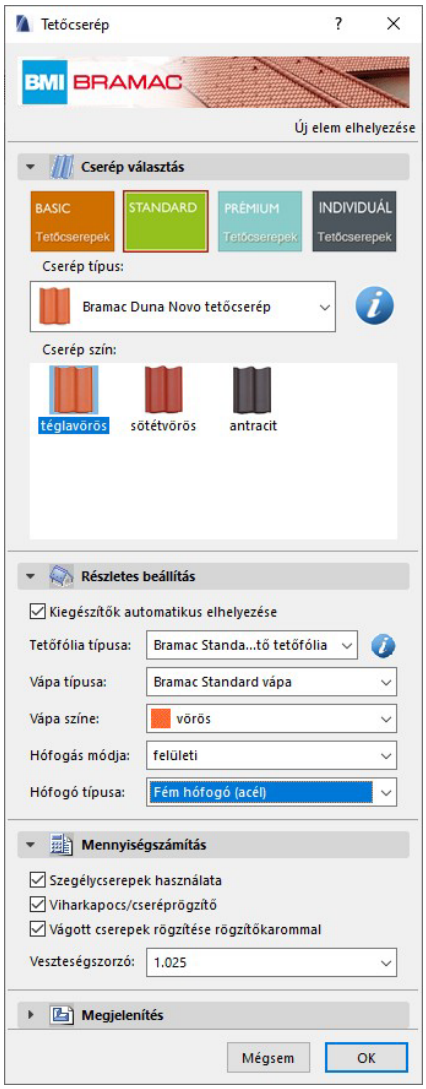
Using the Bramac Rooftiling Application

2.1 Basics of Using the Program

The parameterized library elements (tile and ridge tile) are placed taking into account the relationship between roofs, walls, and fills simultaneously selected on the floor plan. elThe roof and its associated object are grouped together. This group can later be ungrouped using the relevant Archicad command. No automatic link is created between the roof and the tile or ridge tile element. This means the placed library element does not follow changes in the roof's properties (e.g. pitch angle). Deleting the roof also has no effect on the associated elements.
Based on the geometric analysis of the selected elements, it is determined which edge of the roof polygon should be the valley, eave, ridge or gable, where the chimney- or wall flashing should be placed, etc.

When should the program be used?

Ha a rooffelépítmény „végleges” formájában elkészült. Tehát az oromfalak, kémények, roofablakok és más nyílások a helyükre kerültek. It is advisable to verify the accurate assembly of the roofs. Although the program works with a tolerance of a few cm-, it can still handle minor inaccuracies. If everything is in order, the program can be used – starting with placing tiles and ridge tile ellements and then assigning accessories.



2.2 Placing the Tile Surface

The relevant menu item in the Bramac menu only becomes active after the required elements (roof, optionally wall, fill) are selected. Let's review the dialog box of this menu item:
In the upper part of the window, define the tile type and color. First select the tile family (BASIC, STANDARD, PRÉEMIUM or INDIVIDUAL), then choose the appropriate tile type.

The **info** button next to the tile type also helps. Click it to open the online information page for the selected Bramac tile type and learn about its main data.

Details section:

Here you can set whether the listing should take into account the border tiles.

With automatic placement of accessories, ventilation tiles and snow-guard elements are placed on the roof. For the latter, you also need to specify what type (snow-guard tile, aluminium or steel snow guard) and how (linear or surface) you want to implement it.

Here you can also specify the roofing membrane type, and the valley type and color. Az **info** Clicking the button opens the Bramac.hu information page, where you can find data about the selected membrane.

To fix the tiles you can use storm clips or tile fasteners. For cut tiles, fixing clamps may also be used. These will only appear in the listing.

A ***Quantity calculation*** : the tile quantity increased by the waste factor is reported.

A ***Display*** section: set the information shown on the floor plan, and specify which layer the tile- and ridge tile objects should be placed on.

Az ***OK*** The OK button is only active when all required data has been entered.

2.3 Adjusting Roof Edges

The program determines the roof edges automatically. For more complex roofs, the add-on may assign incorrect edge types to some roof sections based on the algorithm. The Bramac roof tiling solution has therefore been extended with a new step, so that roof edges can be adjusted precisely and easily if needed, and the designer can correct any incorrectly assigned edge.-

Important! A After setting the tiles, the roof tiler places an edge-setting GDL element on the roof. This element only appears temporarily on the plan and disappears after the tiling is finalized. Please do not move or place this element on a different layer, as otherwise the roof tiler add--on will not function.

When the edge-setting element appears, an icon appears on each edge of the roof showing the edge type assigned to each roof edge.
If the automatically assigned edge-típusok megfelelőek vagy az élek beállítását nem szeretné elvégezni, akkor nyomja meg a „Finalize Tiling” gombot a dialógban.

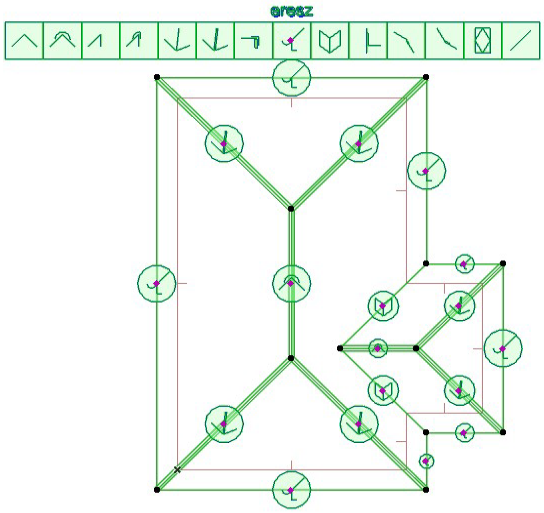
If the edge types are not correct and you wish to change them, you can do so in two ways.

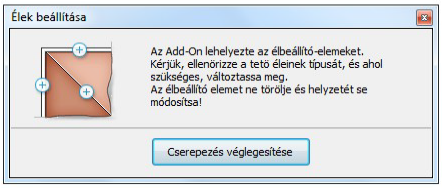
1) Setting edge type on the floor plan:

Grab the purple handle in the center of the icon and move it upward. The available edge types for that edge will appear – find the one you need and drag the purple handle onto it.

Always use the "Move Node” funkciót használja a lebegő palettán. Az él--selection icons appear when you move the handle upward.

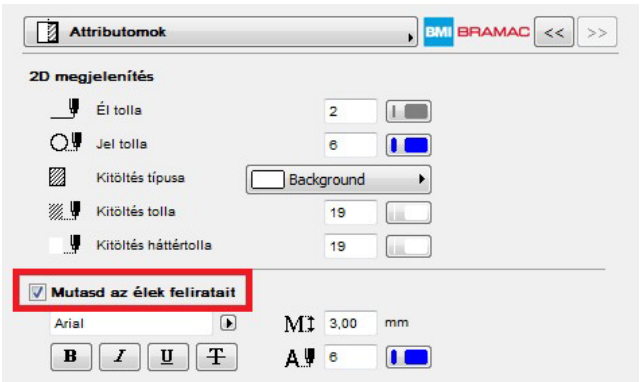
The add-on's assigned edge--type icon is always above the circular icon. To restore the original edge-type (if you can't remember which it was), drag the handle onto this icon.

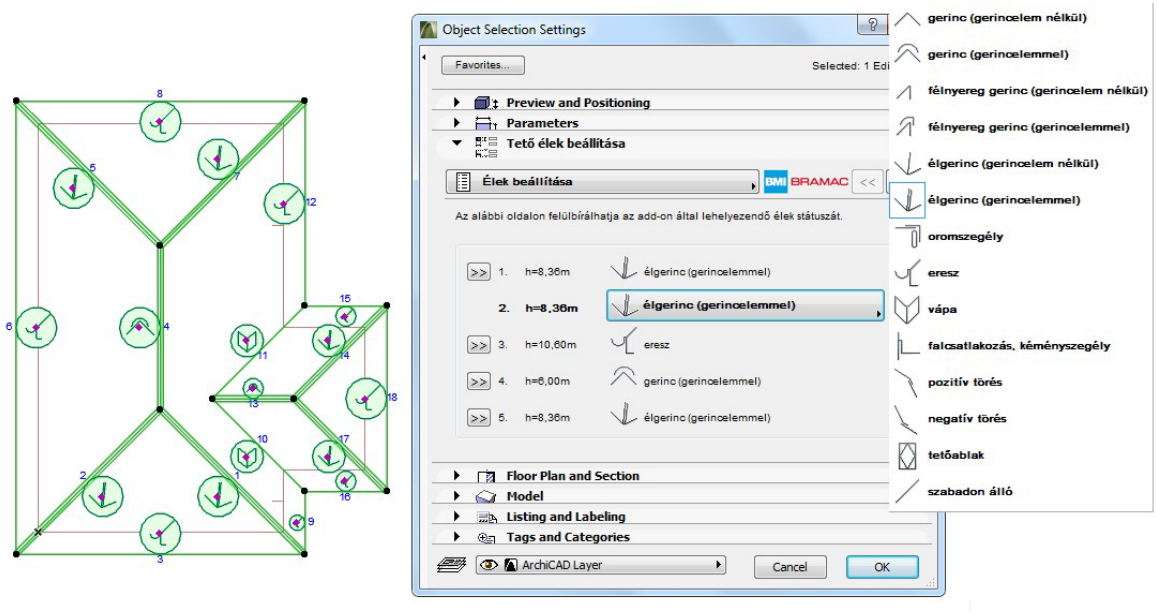




2) Setting edge type in the Object Settings dialog:

Open the "Object beállí” ablakot az Infotáblán vagy a Ctrl+T billentyűkombinációval, then use the Tető élek beállí fül „Attribútumok” oldalán kapcsolja be a „Mutasd az élek feliratait” kapcsolót. Ezzel a tárgyon bekapcsolja az élek számozását. Then on the "Edge Settings" page, use the numbering to change the appropriate edges” oldalon in the list.

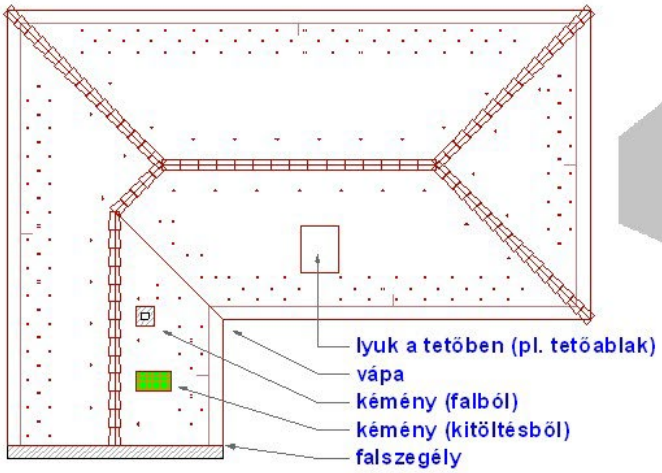


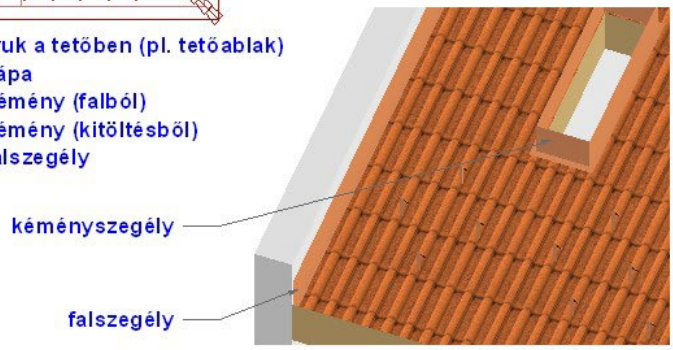


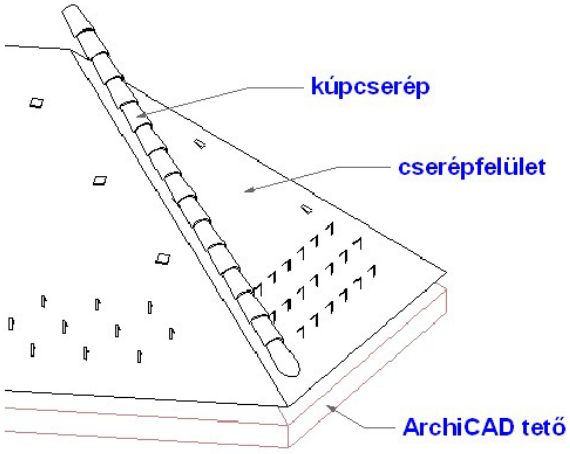
Possible edge types:

- ridge (without ridge element)
- ridge (with ridge element)
- half-hip ridge (without ridge element)
- half-hip ridge (with ridge element)
- hip ridge (without ridge element)
- hip ridge (with ridge element)
- gable trim
- eave
- valley
- wall flashing, chimney flashing
- positive break
- negative break
- roof window
- freestanding

You can use either of the above two methods to adjust the edges. When finished, press the " **Finalize Tiling**”gombot.







After closing the edge-setting dialog, the program places the roofing elements: ridge tiles are placed on ridges and hip ridges, supplemented at the necessary locations with distributing ridge tiles, closing elements or starter hip ridge tiles. The tile surface can be automatically supplemented with ventilation tiles and – depending on your choice – snow-guard tiles or metal snow guards. Chimney flashings, wall flashings, gable trims and special tiles (eave tiles, ridge tiles, trimming tiles, border tiles, etc.) are placed in the correct positions based on the geometric relationship between the roofs, walls and fills selected together.

Important! A wall and roof connection is only possible if they share a common edge on the a floor plan, so their spatial position is otherwise arbitrary. It follows that when creating a chimney, the roof must be pierced!

2.4 Placing Accessories

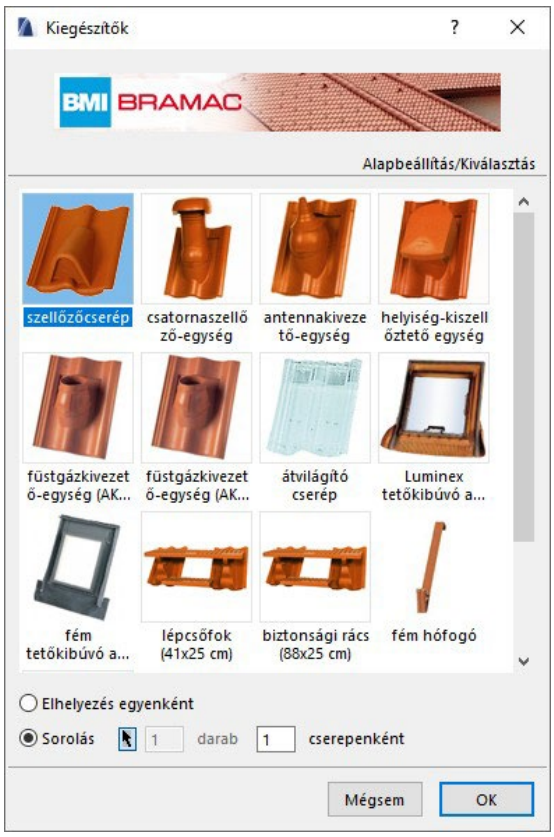
In addition to the accessories automatically assigned to the tile surface (ventilation tiles, snow guards), it is also possible to individually place various elements. To do this, first select 1 tile surface, then use the ***Place Accessories*** m menu item to specify what accessory you want to attach to the tile surface.

The color of the accessory is automatically matched to the color of the tile surface.

In the lower part of the dialog, you can specify the placement method. This can be individual placement or row placement. In the latter case, you can specify how densely the elements should be placed, and also decide whether to place a given number of accessories or to draw a section to define where the row elements go. The arrow (↖) icon acts as a switch to determine which mode is used. For some accessories, row placement is not available – only individual placement.

The available range of accessories depends on the tile type.

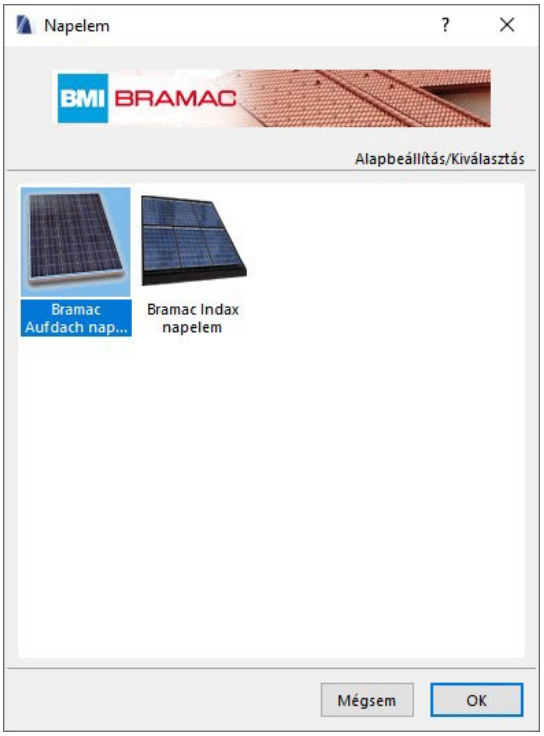
Accessories can only be assigned to multiple tile surfaces one after another.



2.5 Placing Solar Collectors

Solar collectors can be placed in the same way as other accessories discussed above. The only difference is that the ***Place Solar Collector*** menu item must be used.

Solar collectors can be placed in the same way as other accessories discussed above. The only difference is that the In the settings window, select the appropriate type, then close with the OK button and place the solar collector at the desired location on the floor plan. ***OK***
This accessory can only be placed individually and cannot be placed in rows.
As these are specific products, the size of solar collectors is fixed and cannot be changed.



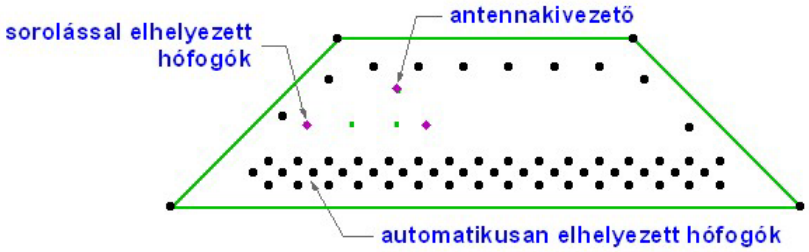
2.6 Placing Solar Panels

Solar panels can be placed in the same way as other accessories discussed above. The only difference is that the ***Place Solar Panel*** menu item must be used.

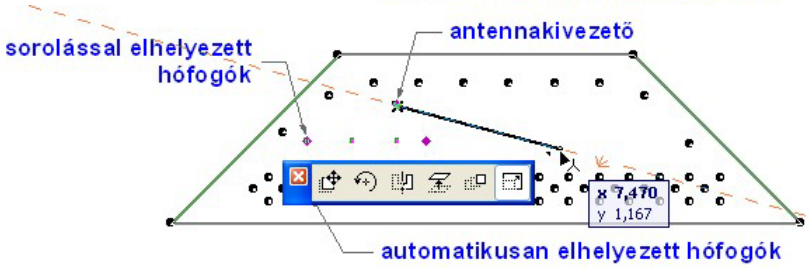
In the solar panel settings window, select the appropriate type, then close with the OK button and place the solar panel at the desired location on the floor plan. This accessory can only be placed individually and cannot be placed in rows. As these are specific products, the size of solar pane***OK*** ls is fixed and cannot be changed.

2.7 Modifying Accessories

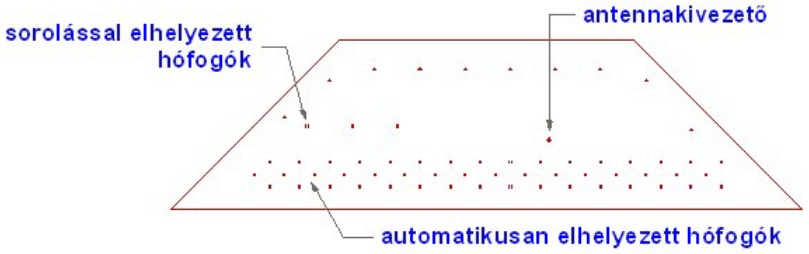
It is possible to change certain properties of accessories after placement.
The position of automatically placed accessories cannot be changed.
The position of individually placed accessory elements and the quantity of row-placed ones can be modified later as follows: Select the tile surface to be modified (not the roof!)k.



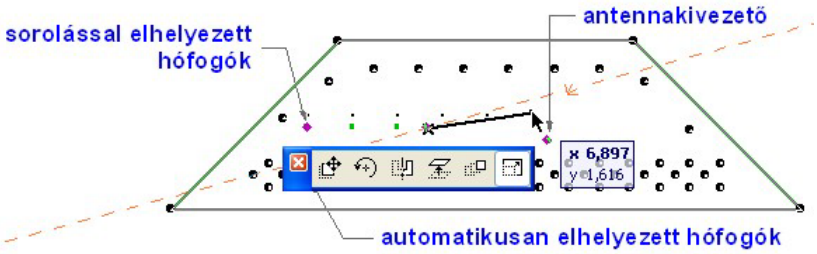
The easiest way to select the tile surface is via the accessory handles



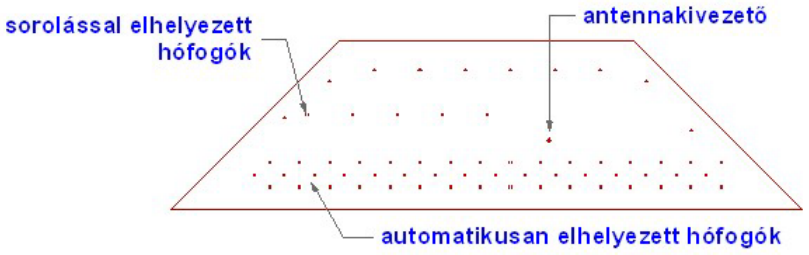
Moving a non-row accessory is done using interactive handles



The accessory in its new position



Changing the position and quantity of row elements is also done with interactive handles

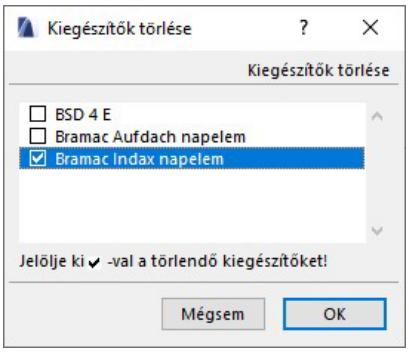


The row accessory in its new position with the modified quantity

The position of solar roof systems can also be modified as described above.

Important! For some accessories, they may initially only be moveable parallel to the eave.
In this case, the change can only be done in two separate operations.
When moving accessories, the program does not check whether the elements are within the tile surface!

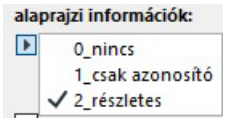
2.8 Deleting Accessories, Solar Collectors and Solar Panels

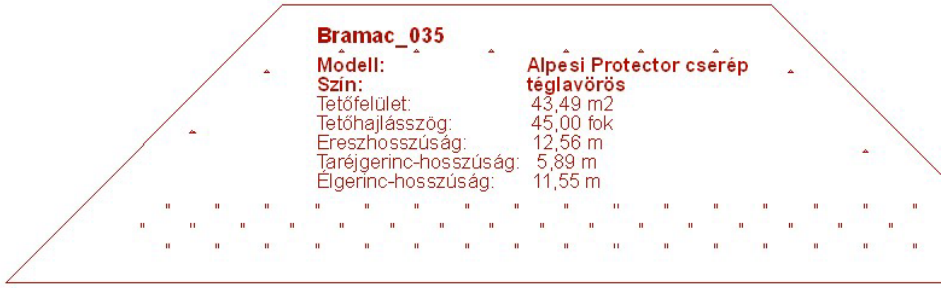


To delete accessories, solar collectors and solar panels, use the Delete Accessories menu item after selecting the tile surface. The dialog that appears shows the accessories assigned to the selected tile surface. Az Check the checkbox before the elements, then close the window with the ***OK*** OK button to delete the selected accessory or solar roof system.

2.9 Information Displayed on the Floor Plan

Various information about the tile surface and ridge configuration can be displayed on the floor plan. These can be primarily geometric and product data.
When placing the tile surface, you can choose what you want to see on the floor plan:

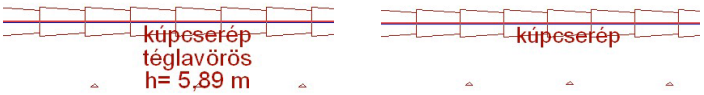




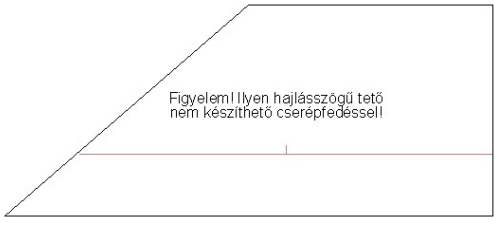
The amount of text can be reduced to just the identifier, which may play a role in listing (see Chapter 3)

Further details in section 2.9.

The same approach applies to ridge tiles:



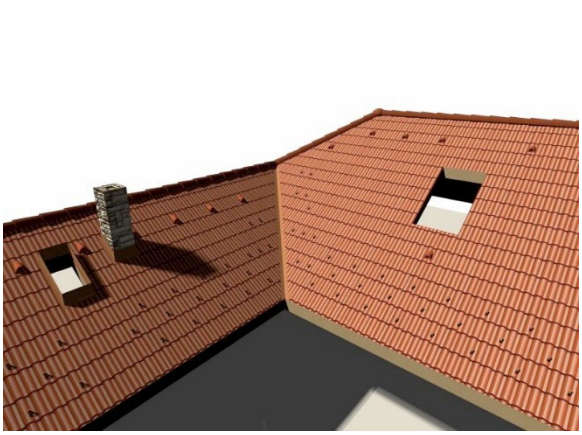
If the tile surface does not meet a certain checked criterion (e.g. pitch angle), an error message will be displayed.



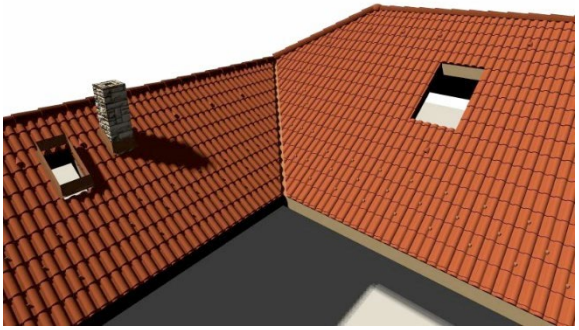
2.10 Displaying 3D Tiles and Fills in the 3D View

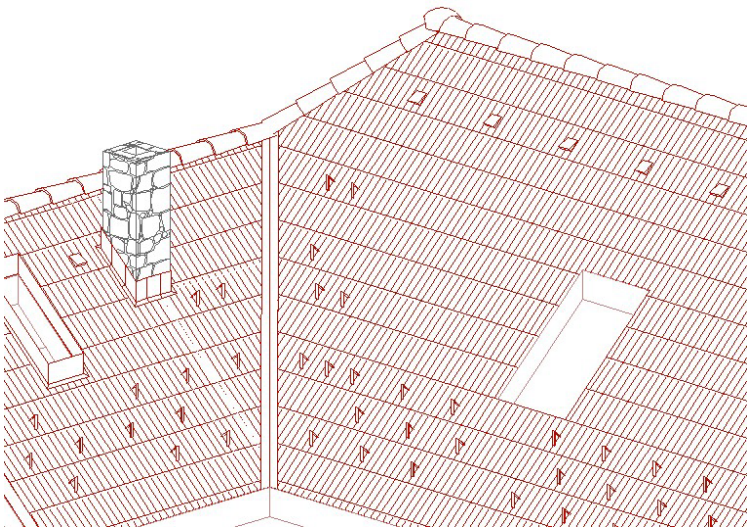
The program can display the tiling on the 3D model in three ways:
- As a textured flat surface (fast, visually appealing)
- As individual 3D tile elements (realistic appearance)
- Hidden line display with fills (recommended for black--and-white printing, elevation drawings) The display modes do not affect listing – the quantity of products in the item schedule is the same in all three cases.

Textured display:
The program uses this type as the default display. After placing tiles on roof surfaces, you will see this display in the 3D window. Using Archicad's OpenGL rendering engine, the textures accurately represent the appearance of the planned roof covering.
If you want to change this display mode, choose 3D display or the use of fills.



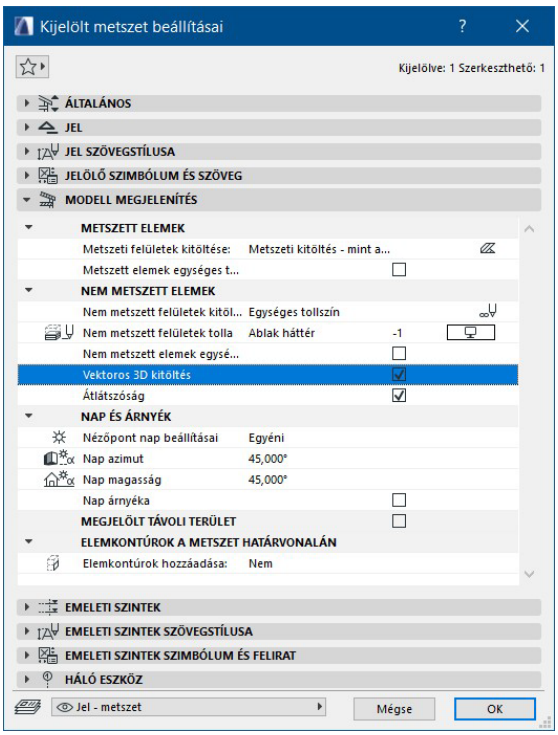
3D tile display;
By selecting all Bramac roof elements (including ridge tiles) in the element settings-ablakában átállíthatja a megjelenítés formáját „3D cserepek”. In this mode, the program places the tiles individually on the roof surface. This display mode allows the roof elements to appear realistic even when viewed up close in renderings. This display mode creates a large number of polygons in the 3D model and may slow down rendering. We recommend enabling this display mode only after finishing editing and just before creating visualizations (or exporting the model).

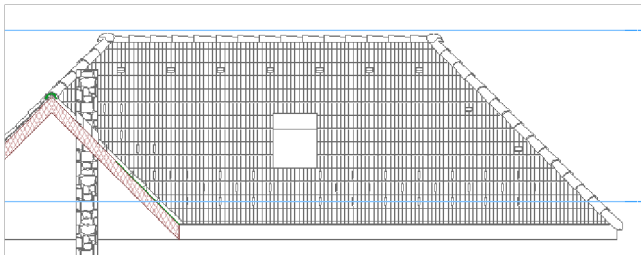




The result is visible in the 3D window.

The vector 3D- fill can also be made visible in the Section/Elevation window. To do this, activate the relevant switch in the settings window of the section or elevation:



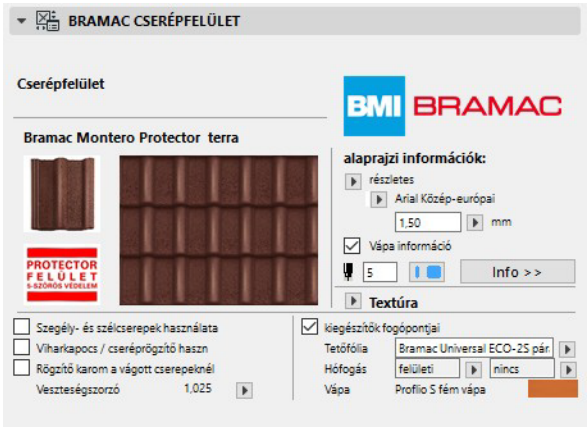


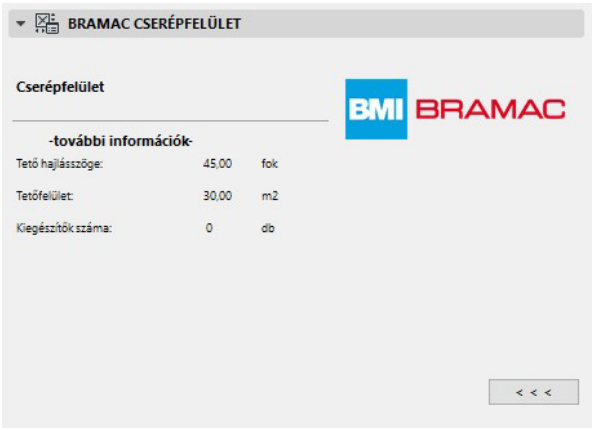
The result is visible in the Section/Elevation window.

Important! This feature is not available in some earlier Archicad- versions.

2.11 Further Properties of Tiles and Ridge Tiles

Certain properties of placed tile surfaces and ridge tiles can also be modified in their settings window.

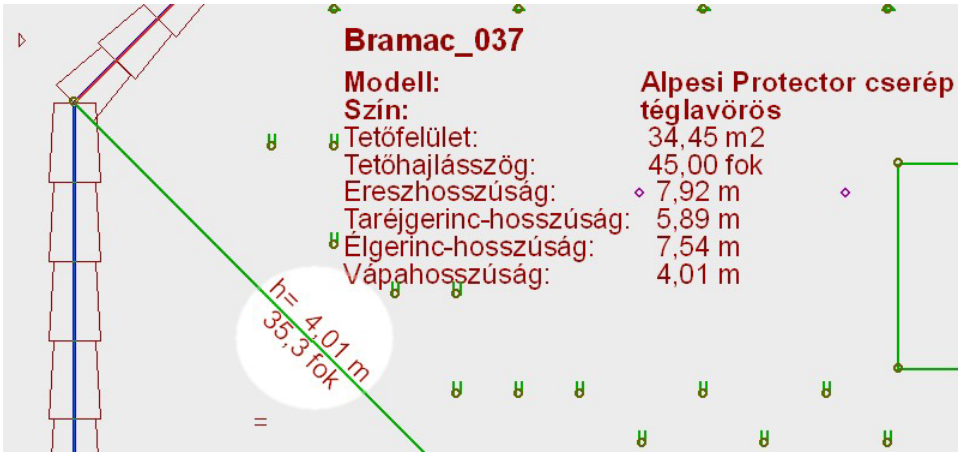




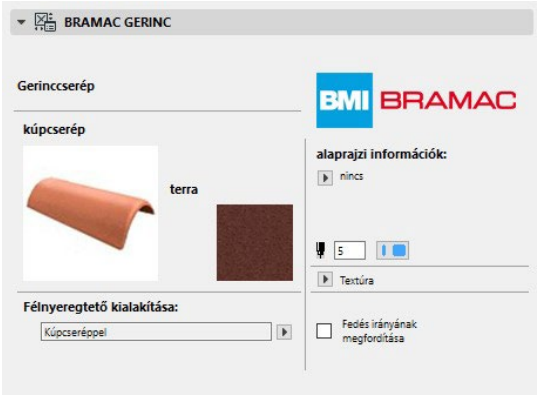
The tile surface settings window

*Az **Info>>>** click to see more data*

As shown in the illustrations above, multiple settings of the tile surface and its assigned accessories can be modified afterwards, even per roof surface. Some properties are shown for informational purposes only and cannot be changed in this window. These include the tile type and color, and the valley type and color. The floor plan information already shown in section 2.9 is extended here with the option to display valley data:



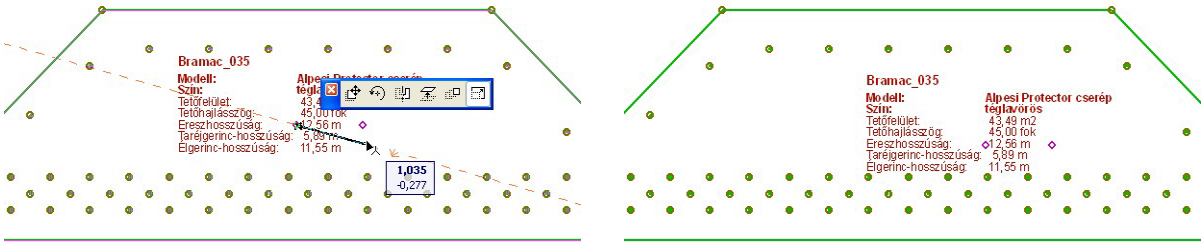
For ridge tiles, the following settings window is displayed:



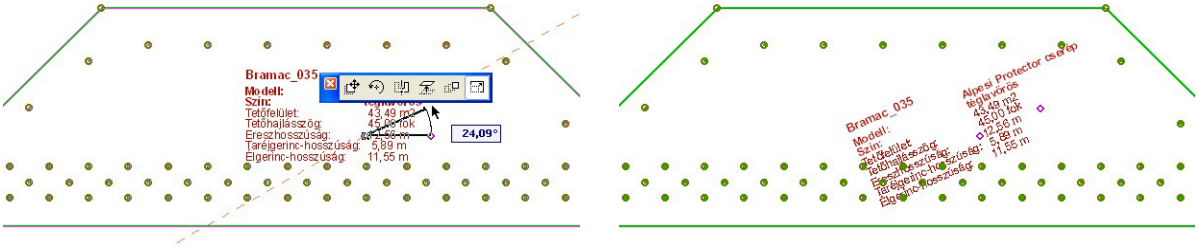
For half-hip roofs, you can specify whether to use a special half-hip tile or the traditional ridge tile to cover the ridge.

If the direction of ridge tile placement is not suitable, use the ***Reverse direction*** switch to change it. This is only modifiable for the main ridge.

The position and angle of texts and error messages related to the tile surface can be freely adjusted using interactive handles.



Moving a text box



Rotating a text box

Chapter 3

Listing

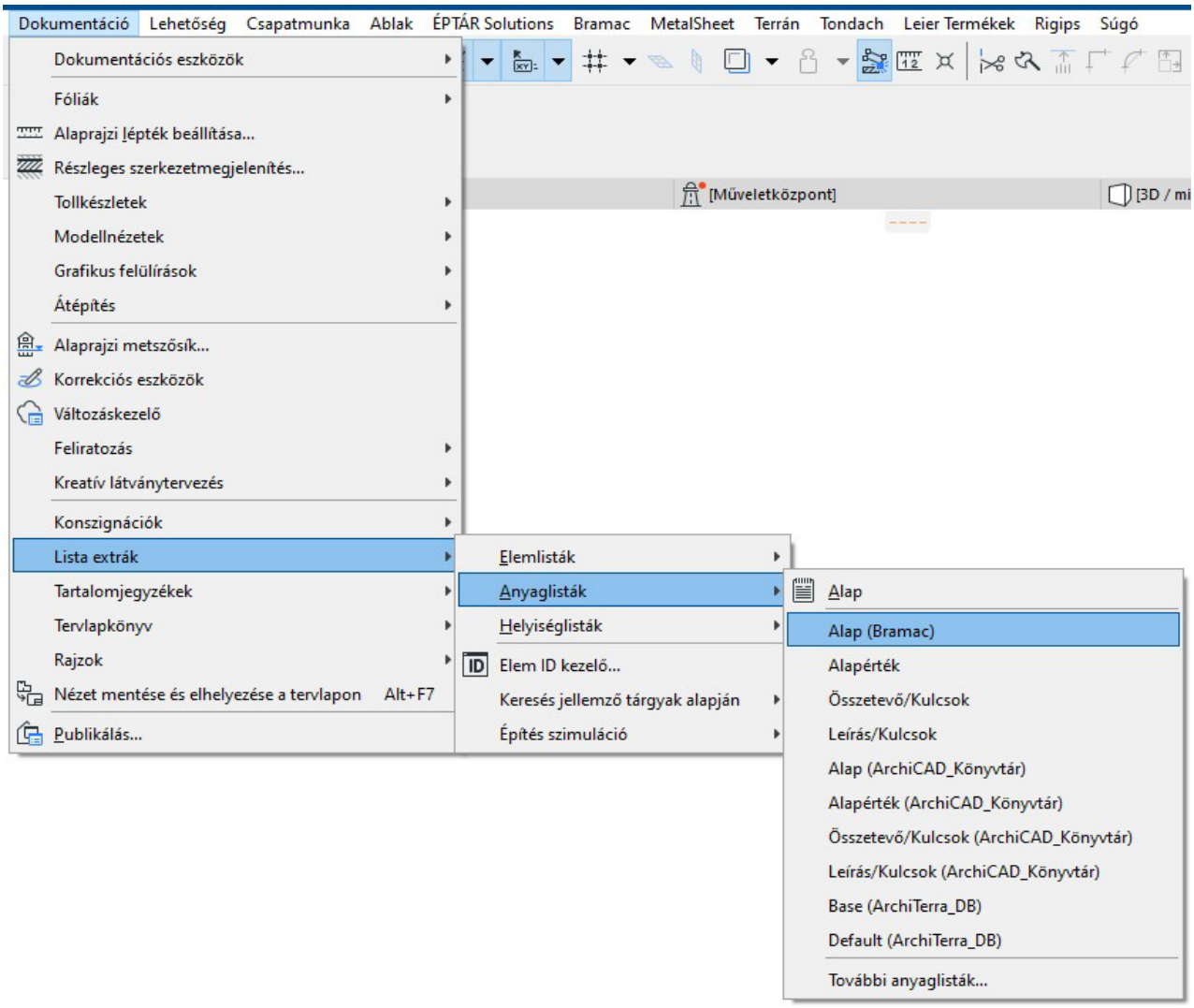
3.1 Listing Bramac Elements

A schedule can be generated from the Bramac tiles used in the Archicad plan.

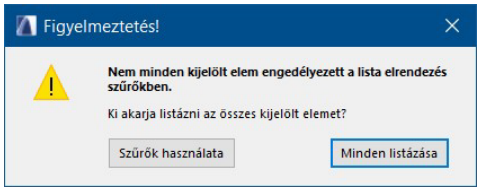
The list includes all tiles and ridge tiles, as well as the accessories and fittings assigned to the surfaces, with or without prices, per surface or consolidated.

Bramac products are listed as components.

Accessing Archicad listing:



Important! During listing, the program automatically filters Bramac elements. In some cases, e.g. when narrowing down the elements to be listed by selection, an element that does not meet the listing criteria may also be included in the selection. In this case, a warning message appears:



We recommend choosing the ***Use the filters*** button.

3.2 Bramac List Templates

The available list templates are presented below.

Tile Schedule (with prices):

Bramac cserepek kimutatása

(Árjegyzék dátuma: 2011. április 1.)

BMI BRAMAC

Megrendelő:	A megrendelő adatai a bramac_megrendelo.txt fájlban találhatók!	**Tervező:**	A tervező adatai a bramac_tervezo.txt fájlban találhatók!

tetőfelújítási kék szám: (40) 949-409 - fax: (88) 425-012 - http://www.bramac.hu - e-mail: infohu@bramac.com

2020.05.31. 1. oldal

	mennyiség	egységár (Ft)	összesen (Ft)
Bramac_005			
Bramac Római Protector Plus tetőcserép			
1/1 tetőcserép (téglavörös)	511 db	311	159 023
1/2 tetőcserép (téglavörös)	11 db	311	3 423
Szellőzőcserép (téglavörös)	11 db	1 096	12 056
Kiegészítők			
Bramac Veltitech 120 párazáró tetőfólia	32 m2	175	5 606
- - -			
Rögzítőkarom	66 db	168	11 098
Fém hófogó, acél (téglavörös)	30 db	208	6 240
Bramac_006 összesen:			**120 063**
Bramac_007			
Bramac Római Protector Plus tetőcserép			
1/1 tetőcserép (téglavörös)	618 db	311	192 322
1/2 tetőcserép (téglavörös)	12 db	311	3 734
Szellőzőcserép (téglavörös)	13 db	1 096	14 248
Kiegészítők			
Bramac Veltitech 120 párazáró tetőfólia	72 m2	175	12 614
Szellőzőszalag	16 m	200	3 200
Rögzítőkarom	66 db	168	11 098
Durovent csatornaszellőző-egység (téglavörös)	1 db	9 903	9 903

* **Megjegyzés:**
- A fenti adatok tájékoztató jellegűek, a számolási hibákból eredő károkért felelősséget nem vállalunk!
- Szegélycserép alkalmazása esetén a léctávolság legalább: hullámos hornyolt tetőcserepeknél 31,5 cm, sík hornyolt tetőcserepeknél 28,0 cm!
- Az alátéthéjazatokra és azok aljzatára vonatkozóan a kivitelezéskor érvényes Tervezési-és alkalmazási Útmutató nyújt részletes tájékoztatást!
- A mennyiségi számítás a tervdokumentáció méretei alapján készült!

Készült az ArchiCAD program segítségével. © Éptár Kft. **Bramac Kft. - 8200 Veszprém, Házgyári u. 1.**

A per-roof-surface list of placed tiles and accessories is generated. Surfaces are sorted by user identifier (ID). Modifying this in the library element settings window is possible but not recommended!

Tile Schedule 2 (without prices):

A per-roof-surface list of placed tiles and accessories is generated. Surfaces are sorted by user identifier (ID). Modifying this in the library element settings window is possible, but not recommended!
Its appearance is the same as above, but the list does not include prices.

Tile Schedule (total):

A **consolidated** list of placed tiles and accessories is generated.

Bramac cserepek kimutatása

(Árjegyzék dátuma: 2011. április 1.)

BMI BRAMAC

Megrendelő:	A megrendelő adatai a bramac_megrendelo.txt fájlban találhatók!	**Tervező:**	A tervező adatai a bramac_tervezo.txt fájlban találhatók!

tetőfelújítási kék szám: (40) 949-409 - fax: (88) 425-012 - http://www.bramac.hu - e-mail: infohu@bramac.com

2020.05.31. 1. oldal

	mennyiség	egységár (Ft.)	összesen (Ft.)
Bramac Római Protector Plus tetőcserép			
1/1 tetőcserép (téglavörös)	2 091 db	311	650 719
1/2 tetőcserép (téglavörös)	46 db	311	14 315
Kúpcserép rögzítővel (téglavörös)	98 db	848	83 104
Szellőzőcserép (téglavörös)	52 db	1 096	56 992
Kezdő élgerinccserép rögzítővel (téglavörös)	3 db	1 272	3 816
Elosztó kúpcserép rögzítőkkel (téglavörös)	2 db	1 272	2 544
Bramac Római Protector Plus tetőcserép összesen:			**811 490**
Kiegészítők			
Wakaflex kémény- és falszegély (vörös)	30 m	3 328	101 384
Szegélylemez beütődübelekkel (vörös)	11 m	1 083	11 769
Bramac Veltitech 120 párazáró tetőfólia	246 m2	175	43 099
Fém hófogó, acél (téglavörös)	229 db	208	47 632
Hófogórács, 3,0 m + 2 db összekötőidom (téglavörös)	12 db	10 720	128 640
Hófogórácstartó (téglavörös)	48 db	7 888	378 624
Gerincléctartó	59 db	188	11 092
Kiegészítők összesen:			**881 907**

MINDÖSSZESEN: **1 693 397 Ft**

(2 116 747 Ft + ÁFA)

Az árak bruttó listaárak és tartalmazzák az ÁFA összegét, a házhozszállítás és a raklaphasználat költségeit!

*** Megjegyzés:**
- A fenti adatok tájékoztató jellegűek, a számolási hibákból eredő károkért felelősséget nem vállalunk!
- Szegélycserép alkalmazása esetén a léctávolság legalább: hullámos hornyolt tetőcserepeknél 31,5 cm, sík hornyolt tetőcserepeknél 28,0 cm!
- Az alátéthéjazatokra és azok aljzatára vonatkozóan a kivitelezéskor érvényes Tervezési-és alkalmazási Útmutató nyújt részletes tájékoztatást!
- A mennyiségi számítás a tervdokumentáció méretei alapján készült!

Készült az ArchiCAD program segítségével. © Éptár Kft. **Bramac Kft. - 8200 Veszprém, Házgyári u. 1.**

Tile Schedule 2 (total) (without prices):

A **consolidated** list of placed tiles and accessories is generated (without prices). Its appearance is the same as above, but the list does not include prices.

Roof Surface Geometry:

The geometric data of placed elements is provided **per roof surface**.

Tetőfelületek geometriai adatai

BMI BRAMAC

Megrendelő:	A megrendelő adatai a bramac_megrendelo.txt fájlban találhatók!	**Tervező:**	A tervező adatai a bramac_tervezo.txt fájlban találhatók!

tetőfelújítási kék szám: (40) 949-409 - fax: (88) 425-012 - http://www.bramac.hu - e-mail: infohu@bramac.com

2020.05.31. 1. oldal

Bramac_005

Hajlásszög:	34,00 fok		
Tetőfelület:	51,62 m2		
Ereszhosszúság:	10,00 m		
Taréjgerinc-hosszúság:	6,00 m		
Élgerinc-hosszúság:	10,65 m		
Vápahosszúság:	4,39 m		

Bramac_006

Hajlásszög:	34,00 fok		
Tetőfelület:	27,79 m2		
Ereszhosszúság:	9,60 m		

– – –

Tetőfelület:	49,39 m2		
Ereszhosszúság:	14,60 m		
Taréjgerinc-hosszúság:	7,80 m		
Élgerinc-hosszúság:	10,65 m		
Fal- és kéményszegélyek hossza:	3,38 m		

Bramac_009

Hajlásszög:	34,00 fok		
Tetőfelület:	21,02 m2		
Ereszhosszúság:	5,01 m		

Készült az ArchiCAD program segítségével. © Éptár Kft. **Bramac Kft. - 8200 Veszprém, Házgyári u. 1.**

Roof Surface Geometry (total):

The geometric data of placed elements is provided **in consolidated form**.

Tetőfelületek geometriai adatai

BMI BRAMAC

Megrendelő:	A megrendelő adatai a bramac_megrendelo.txt fájlban találhatók!
Tervező:	A tervező adatai a bramac_tervezo.txt fájlban találhatók!

tetőfelújítási kék szám: (40) 949-409 - fax: (88) 425-012 - http://www.bramac.hu - e-mail: infohu@bramac.com

2020.05.31. 1. oldal

Tetőfelület:	212,36 m2		
Ereszhosszúság:	54,80 m		
Taréjgerinc-hosszúság:	13,80 m		
Élgerinc-hosszúság:	25,70 m		
Oromhossz (bal):	0,05 m		
Vápahosszúság:	4,38 m		
Fal- és kéményszegélyek hossza:	10,86 m		

Készült az ArchiCAD program segítségével. © Éptár Kft. **Bramac Kft. - 8200 Veszprém, Házgyári u. 1.**