01 / START IN YOUR BIM PROJECT

Loading Type-Catalogues

1 **Keep the files together**

Keep each matching RFA/TXT type-catalogue pair in the same folder with identical base filenames.

2 **Load the finished parent**

In the project choose **Insert > Load Family**. Select the required RFA. If a type catalogue opens, select only the sizes needed. Nested product parts are already included.

3 **Place one trial assembly**

Choose **Architecture > Component**. For face-based products choose **Place on Face**, select the intended exposed host face and check the preview. Review the result in 3D and section.

4 **Set geometry and system data**

Match the actual service and host, set depth and active sides, then record the selected system reference, revision and fire rating. Test this placement before repeating it.

Delivered product group	Families / loading
FS / SL / SL-X collars	27 RFAs; embedded types; no TXT catalogue.
Rectangular 502 / composite 502	2 RFAs; four rectangular and three composite types, embedded.
Servowrap / Rokwrap / Graphite Strap	15 RFAs; 14 matching TXT catalogues. DHS + timber has one embedded type.

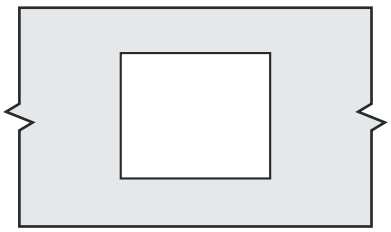
Coordinate the Ryanfire products with your project's MEP or structural elements.

02 / COMBINE THE OBJECTS

Wall + 502 + wrap + service

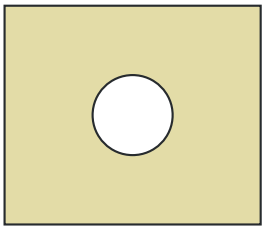
The 502 is a separate seal at the wall opening. The wrap surrounds the service and passes through the seal cut.

1 PROJECT WALL



Opening in continuing wall

2 RYANBATT 502



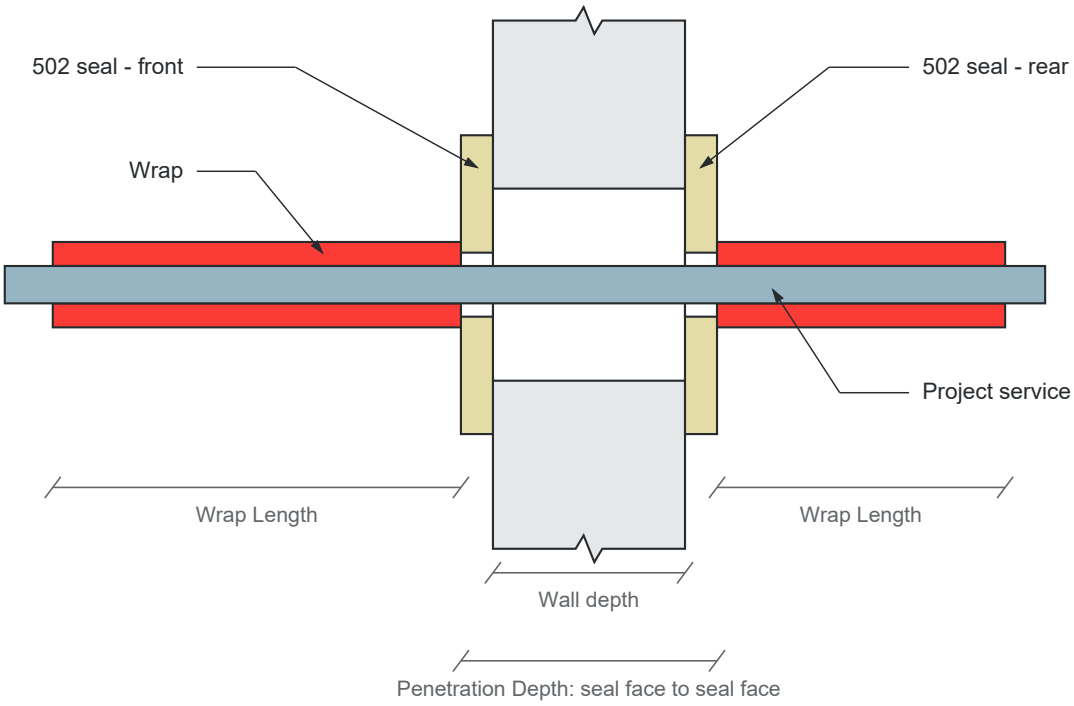
502 seal with service cut

3 WRAP + SERVICE



Use the project MEP service

COMBINED / PLAN THROUGH WALL



NTS. Surface-applied front and rear 502 boards are shown as one example.

Set the rectangular 502 **RF_Host Thickness** to the actual wall face-to-face depth. When placing a wrap on an exposed 502 face, set its **Penetration Depth** to the distance between the exposed mounting faces of the seal. These distances can differ.

502 is used with many wrap details in this library. Select the complete assessed arrangement: substrate, seal, wrap and service must work together. Check cuts in each board and in the project wall separately.

03 / RECTANGULAR RYANBATT 502

Set out the penetration seal

Load RyanFire_Penetration_Ryanbatt_502.rfa. The composite-floor infill is covered in a separate guide.

Control	Where / purpose
Type selector	Four embedded presets: 60min / 120min, each Surface or In Aperture. Names identify supplied presets; enter the actual assessed rating independently.
RF_Opening Width / RF_Opening Length	Instance inputs. Local X = width; local Y = length in the host face. Check dimensions in the family orientation after rotation.
RF_Host Thickness	Instance input. Full distance between the project wall mounting faces; measure the actual assembly.
RF_Surface Applied / Opposite Batt Vis	Type controls. Choose surface-applied or in-aperture geometry and whether the rear batt is shown. Duplicate an editable type before changing it.
RF_Service Edge Clearance	Type formula. Drives board edge overlap in this family; it does not measure the gap from separately placed services.
RF_Board Width / Length / Layers	Calculated outputs. Width and length include the formula overlap; Layers reports the front/rear batt count represented by the type.

Family geometry limitation

While the 502 family is limited to a rectangular shape, 502 can be cut to any shape, if it maintains a minimum 50mm width and follows the fire rating requirements.

Current surface presets use 50 or 100 mm board overlap; in-aperture presets use zero overlap. The minimum service edge-clearance value is separate. Check actual service-to-edge and service-to-service spacing in the project against the selected system.

1

Coordinate and cut

Place the 502 on the wall face, then place the selected wrap or collar on the appropriate exposed seal face. Align its centre with the actual service. Inspect each host and cut in section; a service solid by itself does not create an opening.

2

Check the construction

Confirm board position, overlap or recess, front/rear arrangement, opening limits and required seals/fixings. Preset geometry does not validate a fire system.

04 / WRAPS AND GRAPHITE STRAP

Fit the product to the service

Keep axial wrap length separate from the distance across the host or seal assembly.

Control	How to use it
Family / type	Choose the matching section shape and actual service envelope. A type name is not a system selection.
Penetration Depth	Instance input. Distance from the selected mounting face to the opposite mounting face; positions the rear section.
Wrap Length	Instance input. Axial length per active side along the service. Check it after changing size/type.
RF_Wrap Both Sides	Instance checkbox. Adds the opposite wrap; each active side uses Wrap Length.
RF_Wrap Layers / Thickness	Check supplied constraints. Standard Servowrap geometry has one radial layer; a longer wrap does not add a second radial layer.
RF_Strap Both Sides	Graphite Strap instance checkbox. Penetration Depth positions its rear object. Strap outputs describe that product, rather than wrap fixings.

Place on the seal face

Use Place on Face on the actual 502 or other approved host. Set orientation, align with the project service and check the native void cut. Confirm all front/rear boards are cut and that the opening through the main wall is coordinated separately.

Defaults are starting geometry

Generic Servowrap starts at **300 mm** per active face; Rokwrap at **1000 mm**. Special floor arrangements may need 600 mm and additional radial layers. Use the separate **Wrap Length Reference** with the complete current system drawing.

DHS with attached timber

RF_Servowrap_DHS_250_Timber_250x45 has one 250 DHS + 250 x 45 timber type. It represents the selected combined envelope, with voids for both members and packing in the C opening/web recess. The section and 15 mm thickness are fixed. It contains no steel or timber service solids. Set length, face spacing and sides per instance.

Bands, ties, lap seams, sealants and supports may be omitted from simplified geometry. Their installation requirements remain in the selected Ryanfire detail. Graphite Strap is a separate firestop product.

05 / SCHEDULE AND ISSUE

Check the coordinated result

Schedule the parent assemblies and the represented product quantities deliberately.

Field / measure	Meaning
Revit Count	One placed parent = one assembly. Filter schedules by family/product to avoid counting services or nested objects.
RF_Collar Qty / RF_Wrap Quantity / RF_Strap Qty	Represented products on active sides. A both-sides assembly may be Count = 1 and product quantity = 2.
RF_Wrap Length Front / Back / Total Length	Axial lengths represented. Total = front + back; set schedule totals where appropriate.
RF_Strap Cut Length / Total Length	Geometric strap lengths. Quantities are not a purchase allowance for laps or waste.
RF_Penetration ID / RF_System Ref / RF_System Revision / RF_Fire Rating	Coordinate the installation record with the actual project detail. Populate the available instance fields; verify blanks before issue.

Reload a revised family carefully

Back up the project. Load the updated RFA with Insert > Load Family. **Overwrite the existing version** updates the family definition. Choose **and its parameter values** only when replacing the existing type values is intended; it affects the project's uses of those types. Verify a sample and the schedules afterwards.

Before issuing BIM information

Check the family/type, host and seal faces, actual service envelope, opening, board cuts, depth, active sides and wrap length/layers in 3D and section. Confirm system identifiers and quantities. Check linked-host and unusual configurations in your own project before issue.

Companion PDFs

Collars: family selection, face placement and quantities.
Composite 502: individual trapezoidal infill placement and scheduling.
Shared Parameters: identities, compatible tags and field register.
Verification and **Wrap Length Reference:** separate technical-use references.