rbc

Rebend Connection

barus
rebar splice solutions

Bar-us Rebend Connection System is a quick and easy to install method of maintaining continuity of reinforcement at construction joints in concrete

System Description

Bar-us Rebend Connection System is a quick and easy to install method of maintaining continuity of reinforcement at construction joints in concrete. It consists of a galvanised steel casing with a dimpled surface to provide an effective concrete bond.
Pre-bent bars are housed within the casing and are enclosed by a protective cover. Each end of the unit is sealed with a polystyrene block in order to prevent the ingress of concrete.

Advantages

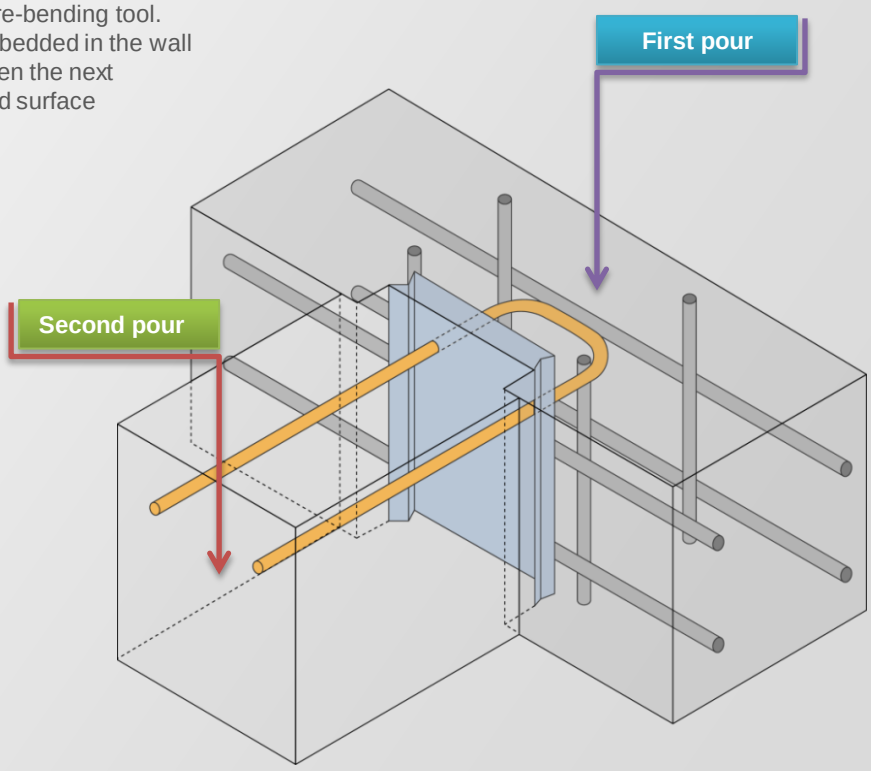
Use of the Rebend Connection System offers many benefits over conventional joint construction, including the simplification of formwork design and removal of the need to drill shuttering.
This contributes to the acceleration of the construction process. As the bars remain enclosed within the casing until required, they are protected and the risk of injury from projecting bars is minimized. Easy to use, the system requires no on site training in order to carry out installation.

Usage

The complete unit is nailed to the formwork. Alternatively it can be wired back to the main reinforcement cage. The concrete is then cast.
After striking the formwork, the cover is removed and the bars are straightened, ready for lapping onto the main reinforcement, using a re-bending tool.
The steel casing remains embedded in the wall and is filled with concrete when the next section is poured, the dimpled surface providing an efficient key.

Traceability

Under the Bar-us Quality Assurance Program, codes are stamped on product. These codes allow the products to be traced back to the original heat of steel.



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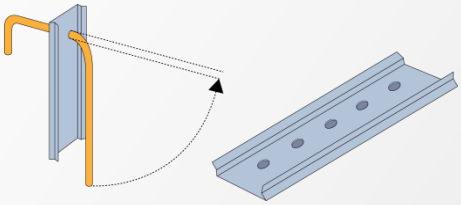
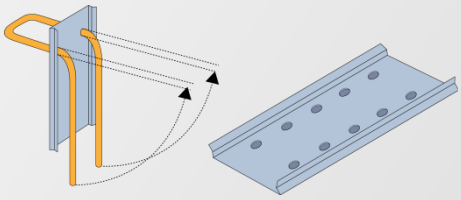
Types

Bar-us Rebend Connection System is divided into five groups according to its usage in the constructions.



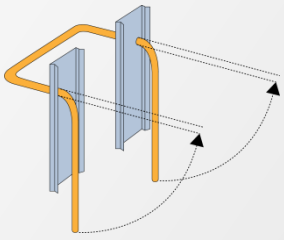
1 Standard Element with Single Row

RBC 55 and RBC 85 models



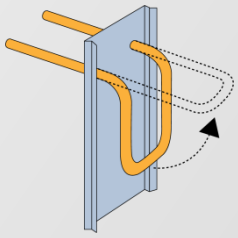
2 Standard Element with Double Row

RBC 120, 150, 190 and 220 models



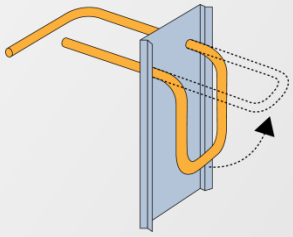
3 Elements with Vairant Profiles

RBC 55 and RBC 85 models



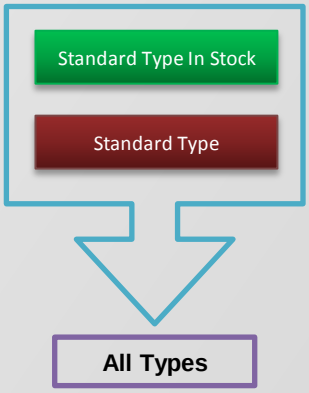
4 Standard Element as Precast Connection

RBC 80 model



5 Elements with Vairant Profiles, Stirrups

RBC 55 and RBC 85 submodels



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Dimension Chart

The most used element type is Type 2. Dimensions of the type 2 rebend connection element is listed below. Contact Bar-us for the dimensions of other types.
Dimension labels are described on the following page.

BAR-US RBC TYPE 2 ELEMENT DIMENSIONS

Item		Order Info	Dimensions of starter bars			For element thickness		Case Dimensions			
profile	Rebar ϕ / spacing s [mm/cm]	RBC.2.120-	$l_ü$ [mm]	h [mm]	b [mm]	D_1 [mm]	D_2 [mm]	width B [mm]	height H_1 [mm]	height width cover H_2 [mm]	element weight [kg]
	8/15	001									4.9
	8/20	002	320		88					24	4.1
	8/25	003									3.7
	10/15	004									7.5
RBC 120	10/20	005	390	170	90	≥ 19	≥ 13	122	12	30	6.1
	10/25	006									5.4
	12/15	007	390								10.1
	12/20	008	440		92					36	8.5
	12/25	009	460								7.6
profile		RBC.2.150-									
	8/15	001									5.3
	8/20	002	320		88					24	4.4
	8/25	003									4.0
	10/10	004	360								10.8
	10/15	005			90					30	7.9
RBC 150	10/20	006	390	170		≥ 19	≥ 16	150	12		6.4
	10/25	007									5.6
	12/10	008	310								16.2
	12/15	009			92					36	11.5
	12/20	010	460								9.1
	12/25	011									7.9
profile		RBC.2.190-									
	8/15	001									5.8
	8/20	002	320		152					24	4.9
	8/25	003									4.5
	10/10	004									11.5
	10/15	005	390		154					30	8.5
RBC 190	10/20	006		170		≥ 19	≥ 19	186	12		6.9
	10/25	007									6.2
	12/10	008	430								17.0
	12/15	009			156					36	12.1
	12/20	010	460								9.7
	12/25	011									8.5
profile		RBC.2.220-									
	8/15	001									6.2
	8/20	002	320		188					24	5.3
	8/25	003									4.9
	10/10	004									12.1
	10/15	005	390		190					30	9.0
RBC 220	10/20	006		170		≥ 19	≥ 23	222	12		7.4
	10/25	007									6.6
	12/10	008									17.7
	12/15	009	460		192					36	12.7
	12/20	010									10.2
	12/25	011									9.0

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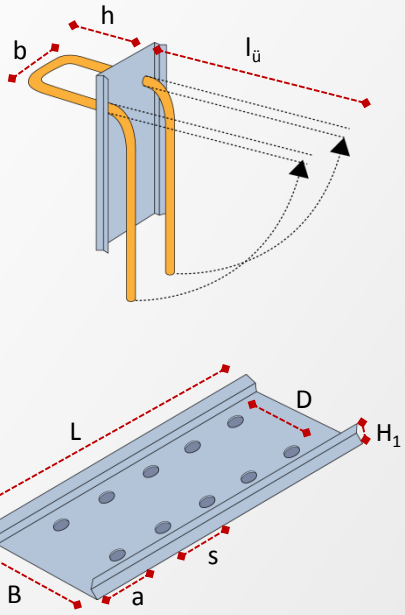
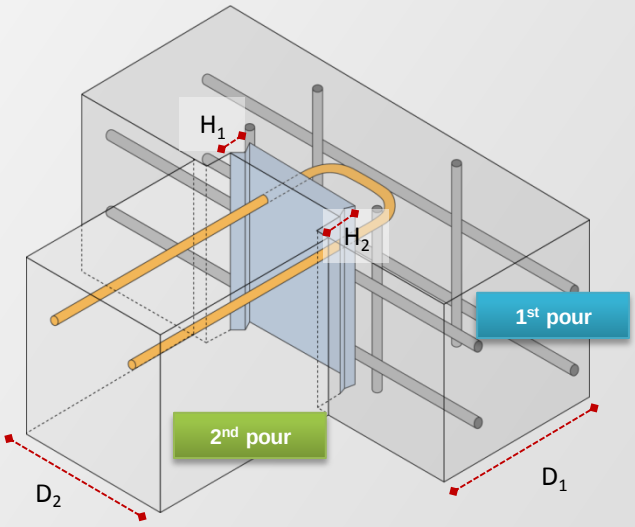
Stirrup Dimensions and Dimension Labels

Dimenson labels of the Type 2 element are as follows.





BAR-US RBC TYPE 2 STIRRUP DIMENSIONS

Element Length **L**	Stirrup spacing [cm]	number of stirrup	end distance **a** [cm]
standard element L = 1250 mm	10	12	7.5
	15	8	10.0
	20	6	12.5
	25	5	12.5

Ordering

Elements can be ordered according to the table on the previous page compatible with the ordering system below:

RBC 220 - 12/15 - 2 - 1250

- 1250 → Element Length L [mm]
- 2 → Element Type (see page 3)
- 12/15 → Rebar Diameter ϕ [mm] / rebar spacing s [cm]
- RBC 220 → Profile Name