



Armaduras de distribuição	
Armadura	Armadura de distribuição
N16	9 N13 ø5.0 c/13 C=VAR
N18	16 N14 ø5.0 c/7 C=535
N18	16 N14 ø5.0 c/7 C=535
N17	9 N14 ø5.0 c/13 C=535
N18	18 N15 ø5.0 c/6 C=VAR
N16	9 N13 ø5.0 c/13 C=VAR

The diagram illustrates the reinforcement details for a slab-beam connection in three views:

- ISOMÉTRICA (Isometric View):** Shows the 3D structure with two slabs (Laje 1 and Laje 2) connected by a central beam (Viga). Negative reinforcement bars (N1) are shown extending from the beam into the slabs. Distribution bars (N2) are shown as small circles on the top surface of the slabs, perpendicular to the main reinforcement.
- VISTA FRONTAL (Front View):** A cross-section of the connection. It shows the beam (Viga) with its reinforcement. The top reinforcement (Armadura negativa superior) is continuous from Laje 1 through the beam into Laje 2. Distribution bars (Armaduras de distribuição) are shown as small circles on the top surface of the slabs. The beam's axis (eixo da viga) is indicated.
- PLANTA BAIXA (Top View):** A plan view of the connection. It shows the beam (Viga) and the slabs (Laje 1 and Laje 2). The reinforcement bars are labeled as 3 N1 $\varnothing X.X$ c/xx. A detail callout (N'2) points to the distribution bars. A table provides the details for the distribution bars:

Ferro de distribuição	
Ferro	Armadura de distribuição
N1	6 N2 $\varnothing X.X$ c/xx

Relação do AÇO						
ELEMENTO	AÇO	N	DIAM (mm)	Q. CUNIT (cm)	C. TOTAL (cm)	
Negativos X	CA60	1	4,2	8	1052	8416
	CA50	2	4,2	30	512	15360
	CA50	3	5,0	10	460	13600
	CA50	4	6,3	8	123	984
	CA50	5	6,3	1	122	122
	CA50	6	8,0	1	122	122
	CA50	7	8,0	1	245	245
	CA50	8	10,0	2	144	288
Negativos Y	CA50	9	10,0	3	247	441
	CA50	10	10,0	2	49	98
	CA60	11	4,2	104	88	9152
	CA60	12	4,2	50	312	15600
	CA60	13	5,0	18	VAR	VAR
	CA60	14	5,0	18	635	21555
	CA60	15	5,0	18	VAR	VAR
	CA60	16	6,3	214	202	43228
Positivos	CA60	17	6,3	54	171	8234
	CA60	18	12,5	185	168	31000
	CA60	19	12,5	185	168	31000

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	QUANT + 10 % (Barras)	PESO + 10 % (kg)
CA50	6.3	535.7	50	144.2
	8.0	9	1	3.9
	10.0	9.4	1	6.4
	12.5	310.8	29	329.3
CA60	4.2	485.3	-	58
	5.0	513.1	-	87
PESO TOTAL (kg)				
CA50	483.8			
CA60	145			