

Field	Units	Description
As1Top	m ² /m	The required area of top reinforcement per unit width in direction 1
As2Top	m ² /m	The required area of top reinforcement per unit width in direction 2
As1Bot	m ² /m	The required area of bottom reinforcement per unit width in direction 1
As2Bot	m ² /m	The required area of bottom reinforcement per unit width in direction 2
Asw/s	m ² /m/m	The required area of shear reinforcement per unit spacing and unit width in principal shear direction
Asw1/s	m ² /m/m	The required area of shear reinforcement per unit spacing and unit width in direction 1
Asw2/s	m ² /m/m	The required area of shear reinforcement per unit spacing and unit width in direction 2
TopLayThick	m	The calculated design thickness of the top layer
BotLayThick	m	The calculated design thickness of the bottom layer
JointThick	m	Thickness of the shell element at the joint
CoverTop1	m	The concrete cover from the top outermost fiber to the centroid of the top reinforcement in direction 1
CoverTop2	m	The concrete cover from the top outermost fiber to the centroid of the top reinforcement in direction 2
CoverBot1	m	The concrete cover from the bottom outermost fiber to the centroid of the bottom reinforcement in direction 1
CoverBot2	m	The concrete cover from the bottom outermost fiber to the centroid of the bottom reinforcement in direction 2
F11	KN/m	The force per unit width acting on shell element at the joint
F22	KN/m	The force per unit width acting on shell element at the joint
F12	KN/m	The force per unit width acting on shell element at the joint
M11	KN-m/m	The moment per unit width acting on shell element at the joint
M22	KN-m/m	The moment per unit width acting on shell element at the joint
M12	KN-m/m	The moment per unit width acting on shell element at the joint
V13	KN/m	The transverse shear per unit width acting on shell element at the joint
V23	KN/m	The transverse shear per unit width acting on shell element at the joint
CrackCond		The cracking condition of the shell element
PhiTop		The value of Phi as calculated by Eq. LL.101 in EN 1992-2:2005 Annex LL at the top of the shell element
PhiMid		The value of Phi as calculated by Eq. LL.101 in EN 1992-2:2005 Annex LL at the middle of the shell element
PhiBot		The value of Phi as calculated by Eq. LL.101 in EN 1992-2:2005 Annex LL at the bottom of the shell element
N11Top	KN/m	The axial force component N11 at the center of the top layer
N22Top	KN/m	The axial force component N22 at the center of the top layer
N12Top	KN/m	The shear force component N12 at the center of the top layer
NmaxTop	KN/m	The maximum principal force per unit width at the center of the top layer
NminTop	KN/m	The minimum principal force per unit width at the center of the top layer
NS11Top	KN/m	The axial tensile force component per unit width in direction 1 at the center of the top layer to be resisted by the top reinforcement
NS22Top	KN/m	The axial tensile force component per unit width in direction 2 at the center of the top layer to be resisted by the top reinforcement
DesCaseTop		The controlling design case for the top layer. This can be Case I, Case II, Case III, or Case IV. See documentation for a description of these cases.
ThetaTop	Unitless	The angle between direction 1 and the principal tensile direction (perpendicular to the cracks) of the top layer
DeltaN11Top	KN/m	The amount of axial force component N11 per unit width at the center of the top layer to be adjusted due to adjustment of tensile force at the location of the reinforcement
DeltaN22Top	KN/m	The amount of axial force component N22 per unit width at the center of the top layer to be adjusted due to adjustment of tensile force at the location of the reinforcement
Nd11Top	KN/m	The design axial force component per unit width in direction 1 at the top reinforcement location and to be resisted by the top reinforcement
Nd22Top	KN/m	The design axial force component per unit width in direction 2 at the top reinforcement location and to be resisted by the top reinforcement
NcTop	KN/m	The principal compressive force per unit width at the center of the top layer
fc_Top	KN/m ²	The concrete compressive strength of the top layer
N11Bot	KN/m	The axial force component N11 at the center of the bottom layer
N22Bot	KN/m	The axial force component N22 at the center of the bottom layer
N12Bot	KN/m	The shear force component N12 at the center of the bottom layer
NmaxBot	KN/m	The maximum principal force per unit width at the center of the bottom layer
NminBot	KN/m	The minimum principal force per unit width at the center of the bottom layer
NS11Bot	KN/m	The axial tensile force component per unit width in direction 1 at the center of the bottom layer to be resisted by the bottom reinforcement
NS22Bot	KN/m	The axial tensile force component per unit width in direction 2 at the center of the bottom layer to be resisted by the bottom reinforcement
DesCaseBot		The controlling design case for the bottom layer. This can be Case I, Case II, Case III, or Case IV. See documentation for a description of these cases.
ThetaBot		The angle between direction 1 and the principal tensile direction (perpendicular to the cracks) of the bottom layer
DeltaN11Bot	KN/m	The amount of axial force component N11 per unit width at the center of the bottom layer to be adjusted due to adjustment of tensile force at the location of the reinforcement
DeltaN22Bot	KN/m	The amount of axial force component N22 per unit width at the center of the bottom layer to be adjusted due to adjustment of tensile force at the location of the reinforcement
Nd11Bot	KN/m	The design axial force component per unit width in direction 1 at the bottom reinforcement location and to be resisted by the bottom reinforcement
Nd22Bot	KN/m	The design axial force component per unit width in direction 2 at the bottom reinforcement location and to be resisted by the bottom reinforcement
NcBot	KN/m	The principal compressive force per unit width at the center of the bottom layer
fc_Bot	KN/m ²	The concrete compressive strength of the bottom layer
Vo	KN/m	The principal shear demand
Phi0		The angle measured from the direction 1 to the principal shear direction
d	m	The effective shear depth of the core in principal shear direction
d1	m	The effective shear depth of the core in direction 1
d2	m	The effective shear depth of the core in direction 2
RhoL	Unitless	The longitudinal reinforcement ratio in principal shear direction
VRdc	KN/m	The concrete shear capacity as calculated by Eq. 6.2 in EN 1992-1-1:2004
VRdmax	KN/m	The maximum shear capacity as calculated by Eq. 6.9 in EN 1992-1-1:2004
Vo/VRdc		The ratio of principal shear over the concrete shear capacity
Vo/VRdmax		The ratio of principal shear over the maximum shear capacity
F11Shear	KN/m	The additional amount of axial force component F11 resulted from the truss model used when shear reinforcement is required
F22Shear	KN/m	The additional amount of axial force component F22 resulted from the truss model used when shear reinforcement is required
F12Shear	KN/m	The additional amount of axial force component F12 resulted from the truss model used when shear reinforcement is required