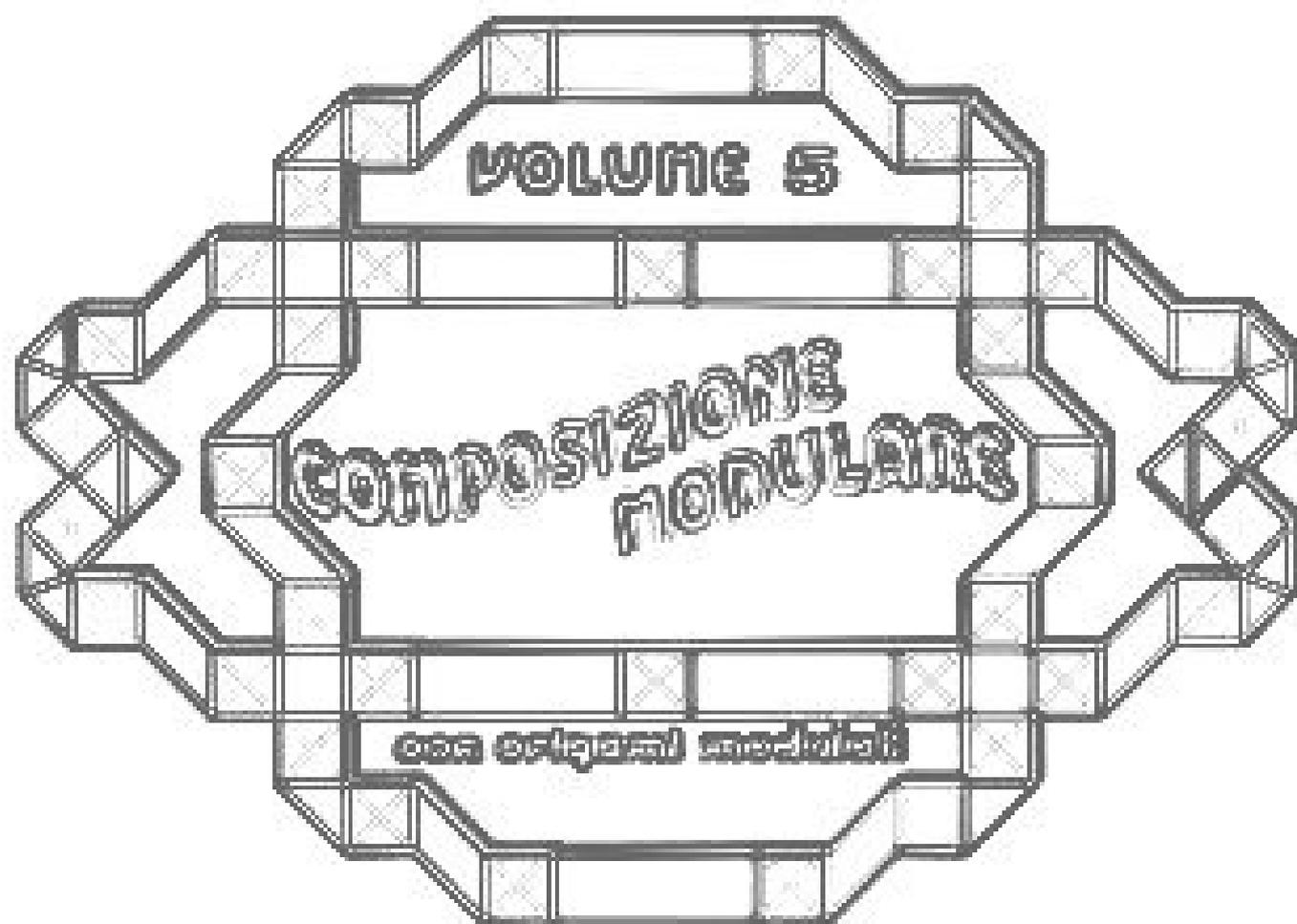




**franco Pavarin**

[www.origami-cdo.it/francopavarin/](http://www.origami-cdo.it/francopavarin/)



**Francesco Cavaliere**  
con oggetti modulari

# PREFAZIONE

Questo libro, ad eccezione di "connect", raccoglie miei modelli creati molti anni fa e che considero ancora validi.

I sistemi costruttivi delle tassellazioni sono quanto mai vari; invece per i poligoni ho adottato spesso un sistema di aggregazione particolare.

Infatti si costruisce dapprima un poligono di aste aventi una tasca centrale e successivamente si inserisce in ognuna di esse un elemento decorativo geometrico o floreale.

In ogni caso, per ottenere ottimi risultati bisogna prestare particolare attenzione alla scelta del tipo di carta.

Aprile 2024

Franco Pavarin

This book, with the exception of "connect", collects my models created many years ago and which I still consider valid.

The construction systems of tessellations are extremely varied; instead for polygons I have a particular aggregation system is often adopted.

In fact, a polygon of rods having a central pocket and is first constructed subsequently a geometric or floral decorative element is inserted into each of them.

In any case, to obtain excellent results you must pay particular attention to choice of paper type.

Este libro, a excepción de "connect", recopila mis modelos creados hace muchos años y que todavía considero válido.

Los sistemas constructivos de teselados son sumamente variados; en lugar de polígonos tengo a menudo se adopta un sistema de agregación particular.

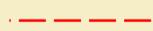
De hecho, primero se construye un polígono de varillas que tiene un bolsillo central y posteriormente en cada uno de ellos se inserta un elemento decorativo geométrico o floral.

En cualquier caso, para obtener excelentes resultados debes prestar especial atención a elección del tipo de papel.

# Simbologia origami

Indicazione

Risultato 3D



Piega a valle  
(piega bassa)



Piega a monte  
(piega alta)



Ruotate e piegate



Ruotate, piegate  
e riportate alla  
posizione iniziale



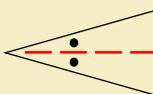
Ribaltate  
sull'asse verticale



Ribaltate sull'asse  
orizzontale



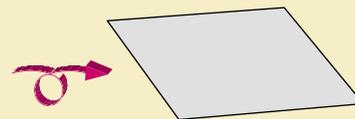
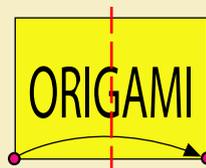
Ruotate di 180°



Piega bisettrice  
a valle



Figura ingrandita

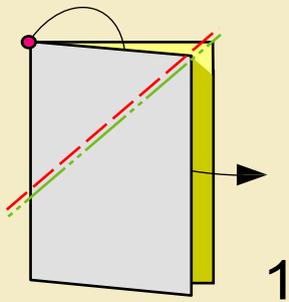


ORIGAMI



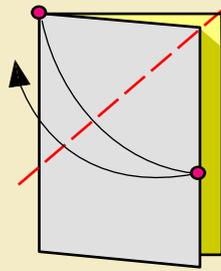
ORIGAMI

# Realizzazione delle pieghe rovesce



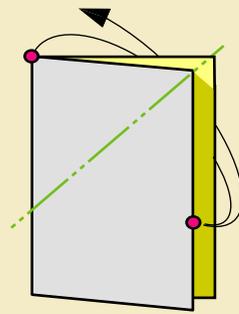
1

Eseguite una piega rovescia interna



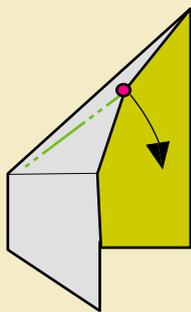
2

Una piega a valle



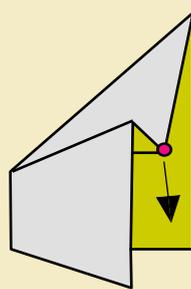
3

Ripiegate con piega a monte sulla medesima traccia



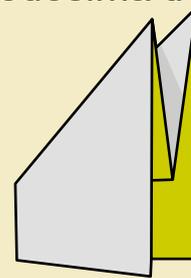
4

Aprite e rovesciate il verso della piega



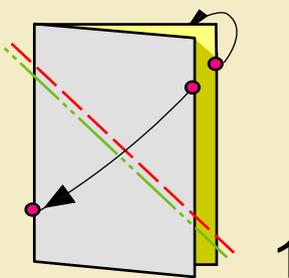
5

Inserite all' interno il vertice indicato



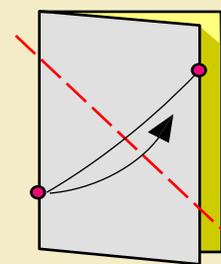
6

Piega rovescia interna ultimata



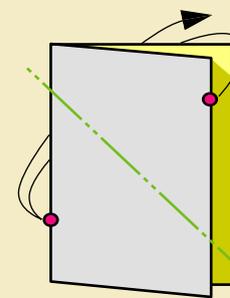
1

Eseguite una piega rovescia esterna



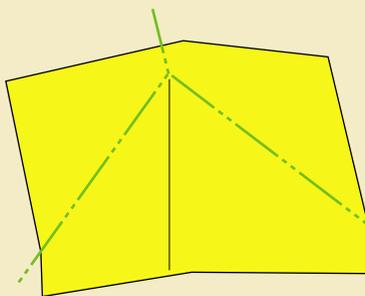
2

Una piega a valle



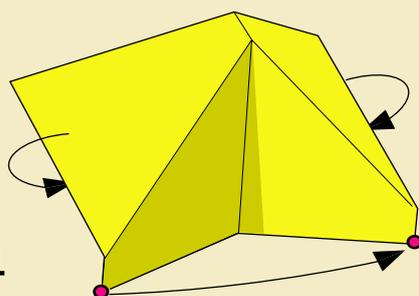
3

Ripiegate con piega a monte sulla medesima traccia



4

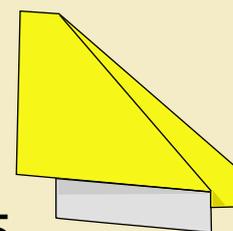
Aprite e rovesciate il verso della piega



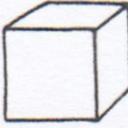
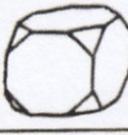
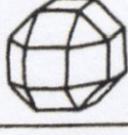
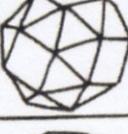
Richiudete

5

Piega rovescia esterna ultimata



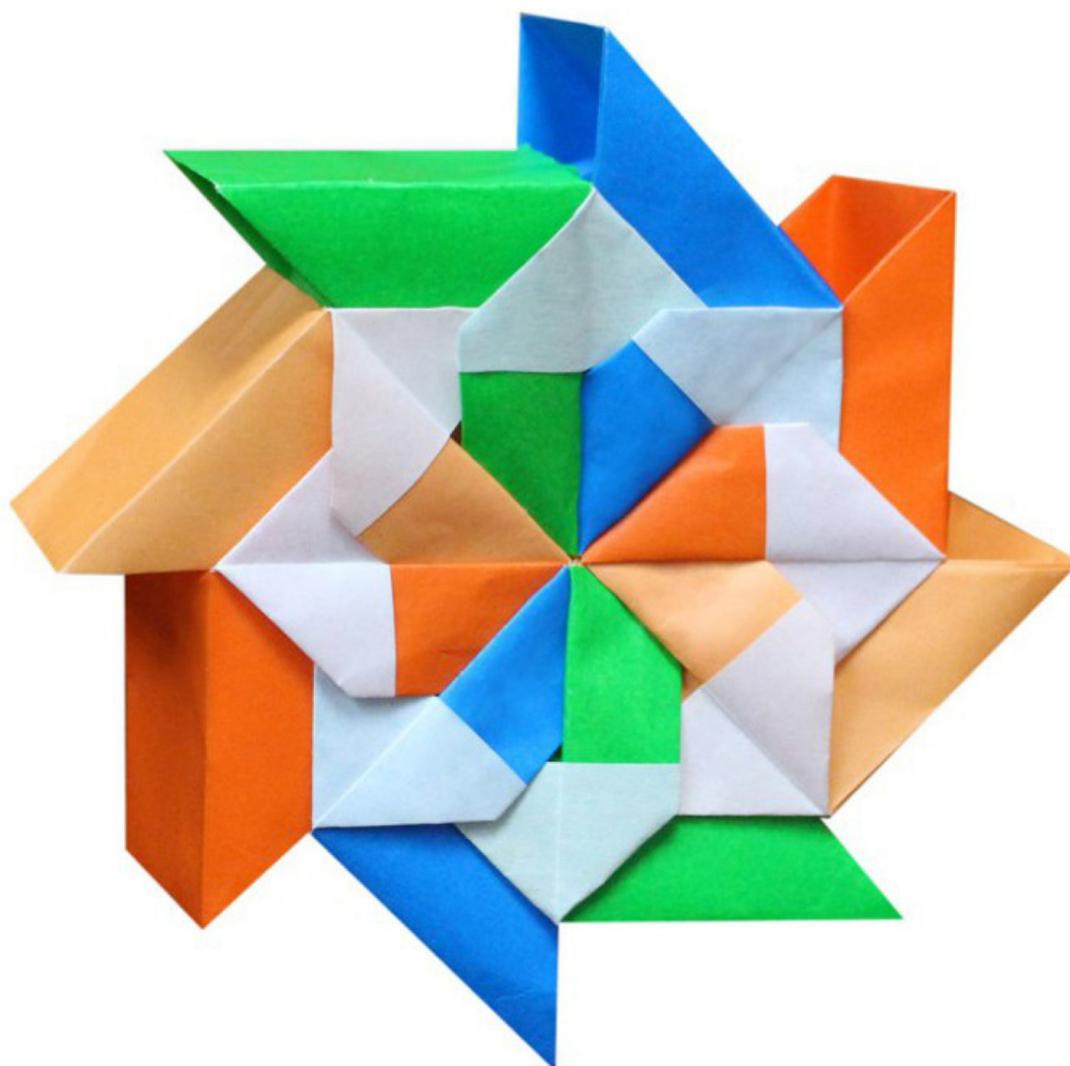
6

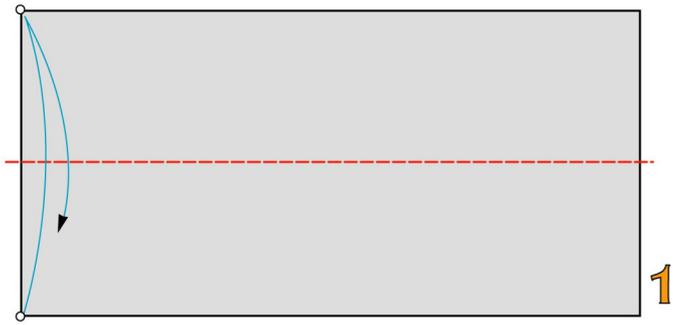
NOME	POLIEDRO	numero triangoli	numero quadrati	numero pentagoni	numero esagoni	numero ottagononi	numero vertici	numero spigoli
TETRAEDRO		4 					4	6
CUBO			6 				8	12
OTTAEDRO		8 					6	12
DODECAEDRO				12 			20	30
ICOSAEDRO		20 					12	30
TETRAEDRO TRONCO		4 			4 		12	18
UBOTTAEDRO		8 	6 				12	24
CUBO TRONCO		8 				6 	24	36
OTTAEDRO TRONCO			6 		8 		24	36
PICCOLO ROMBICUBOTTAEDRO		8 	18 				24	48
GRANDE ROMBICUBOTTAEDRO			12 		8 	6 	48	72
CUBO SIMO		32 	6 				24	60
OSIDODECAEDRO		20 		12 			30	60

# GIRANDOLA MODULARE 3D

**Franco Pavarin 24**

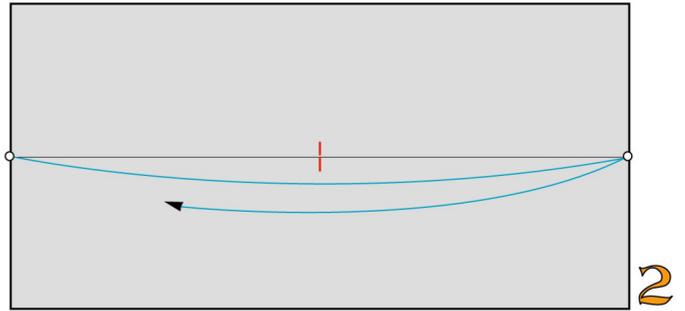
Sono necessari 8 fogli di carta robusta bicolore delle dimensioni di cm 7,5x15





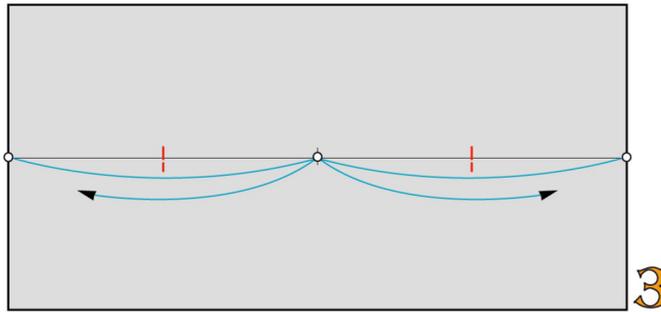
1 piega a valle

1



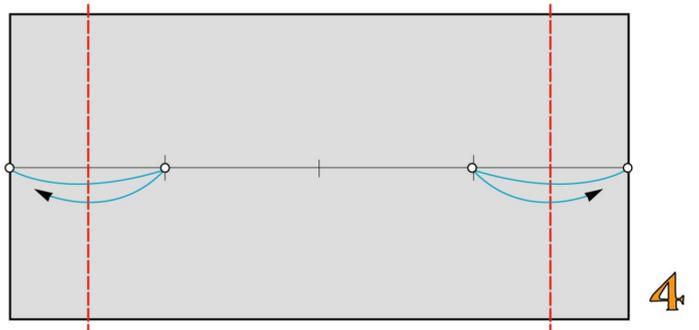
1 piccola piega a valle

2



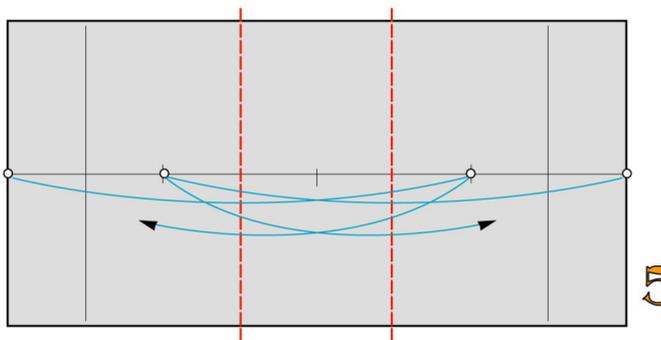
2 piccole pieghe a valle

3



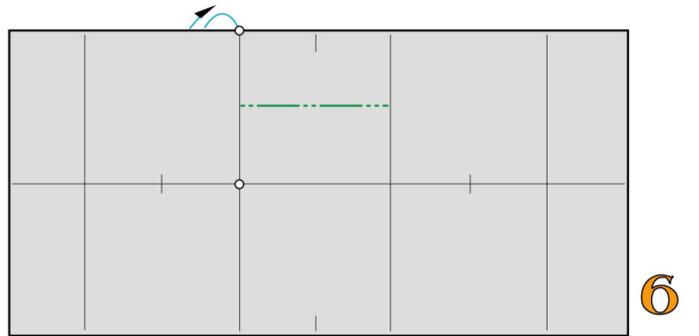
2 pieghe a valle

4



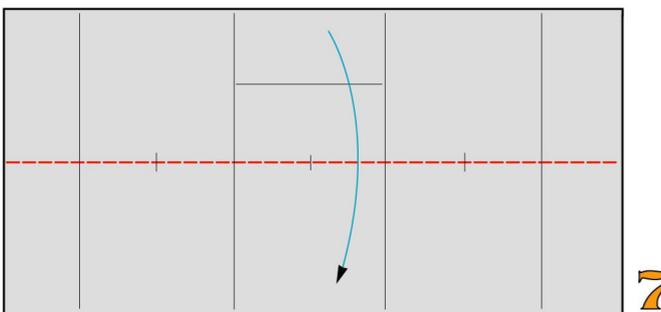
2 pieghe a valle

5



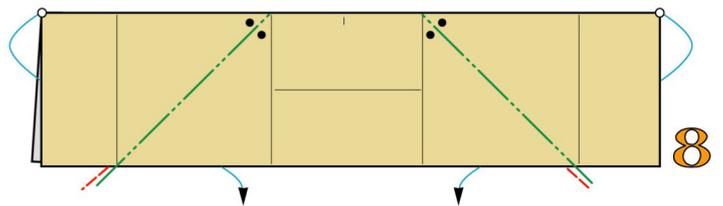
1 piega a monte

6



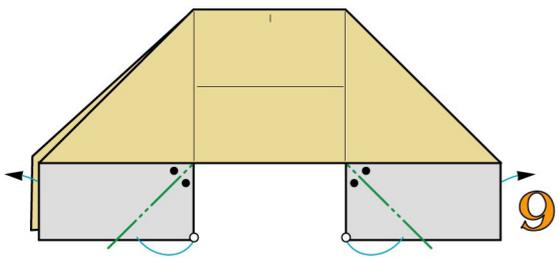
Ripiegate a valle

7

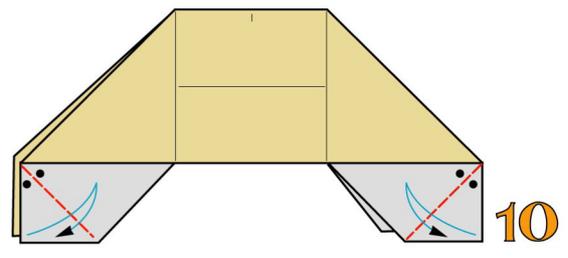


2 pieghe rovesce interne

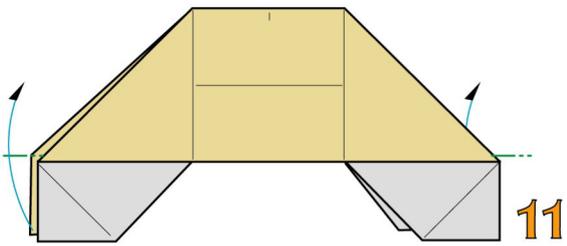
8



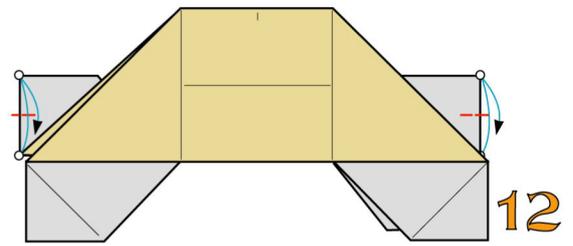
2 pieghe rovesce interne



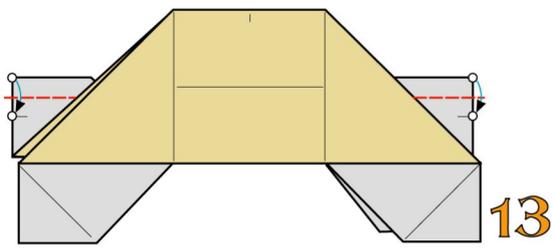
2 pieghe bisettrici a valle



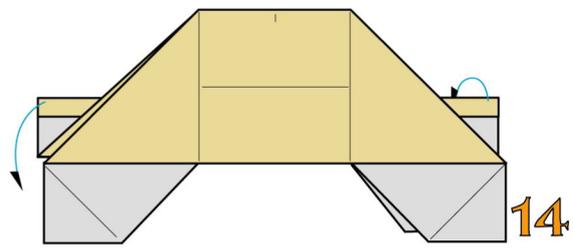
1 piega a monte



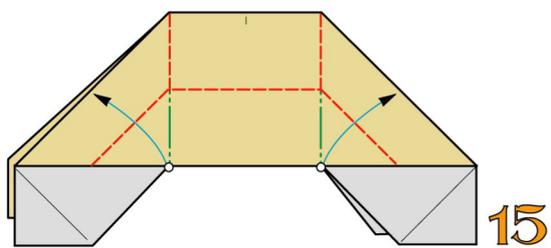
2 piccole pieghe a valle



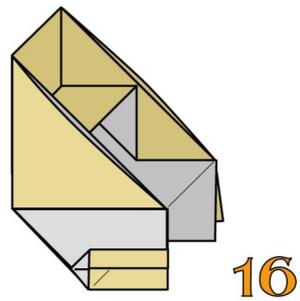
2 pieghe a valle



Abbassate le 2 superfici

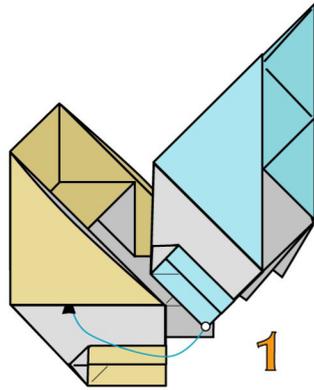


2 pieghe a valle e ripiegate modellando 3D

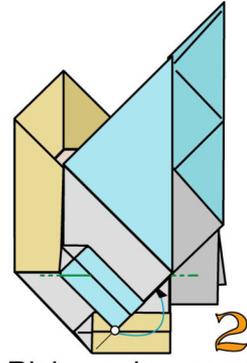


Modulo per girandola 3D ultimato

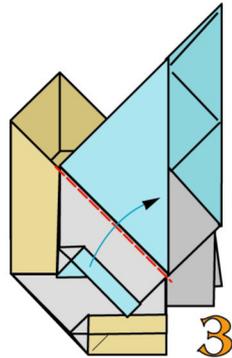
# UNIONE DEI MODULI



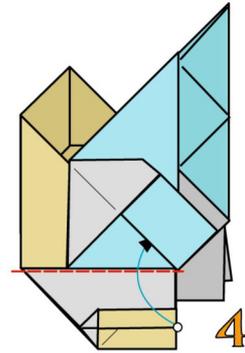
Ruotate un modulo di 45°  
e inseritelo sopra un altro



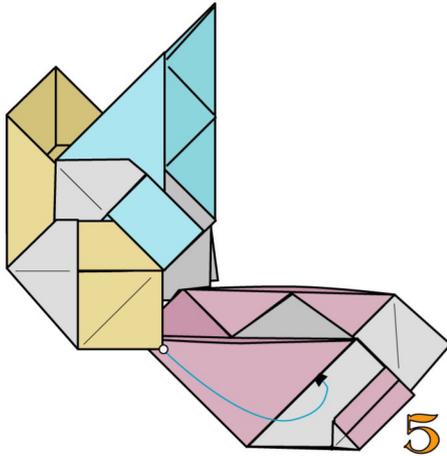
Ripiegando a monte  
intascate e bloccate  
l'unione



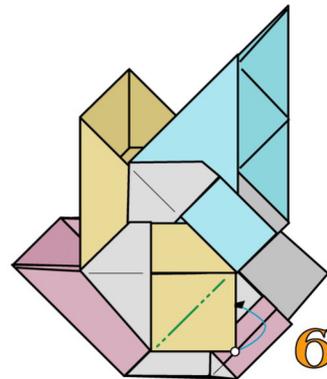
Ripiegate a valle



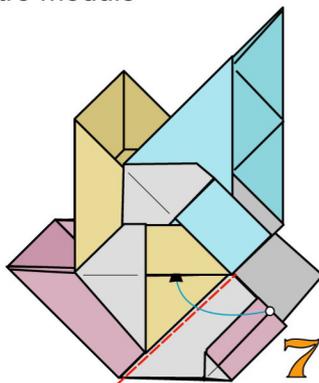
Ripiegando a valle  
intascate



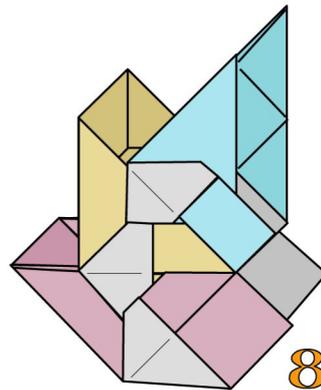
Ruotate di 45° e aggiungete  
un altro modulo



Ripiegando a monte  
intascate e bloccate  
l'unione



Ripiegando a valle  
intascate



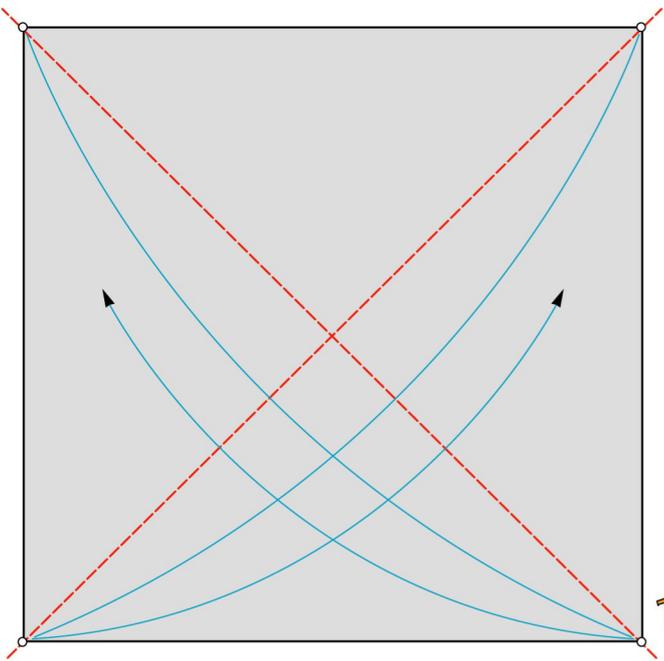
Completate l'unione con 8  
moduli e poi ribaltate e  
ripetete le stesse operazioni  
per l'altro lato

# CUBO TRAFORATO

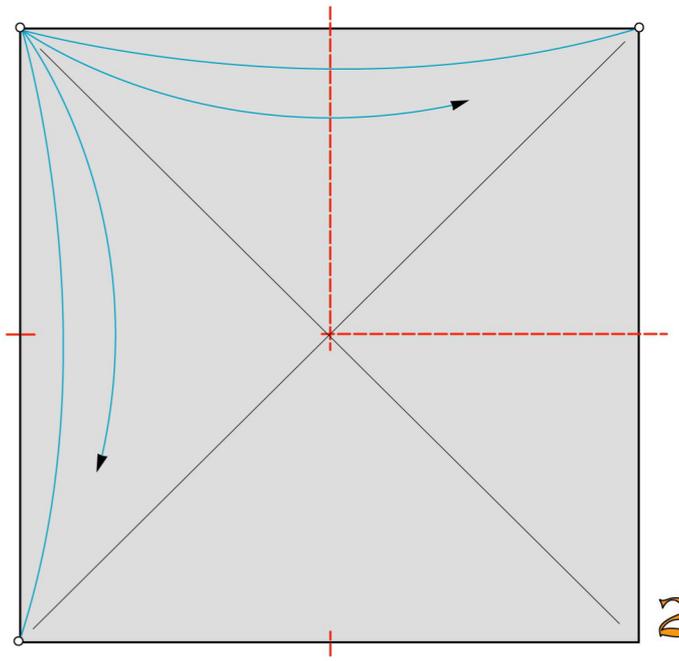
**Franco Pavarin 24**

Ogni cubo si costruisce con  
8 fogli di carta monocolore  
pesante delle dimensioni di  
cm 10x10 oppure 15x15





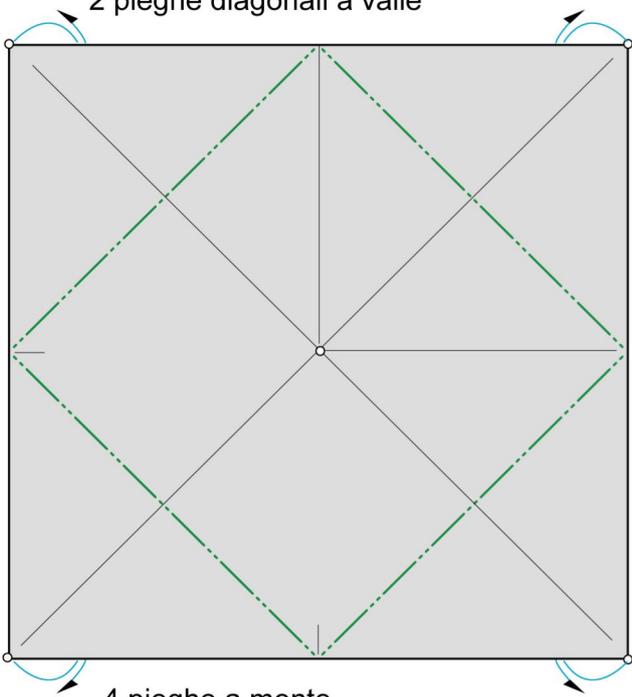
1



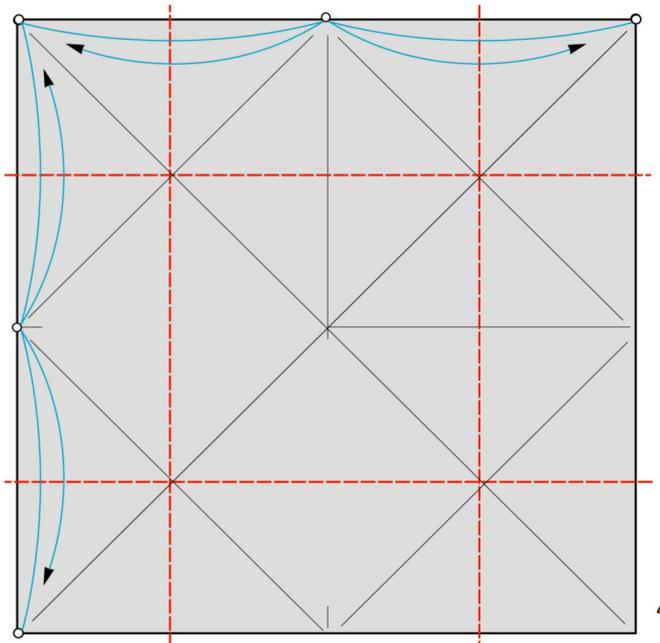
2

2 pieghe diagonali a valle

2 pieghe a valle



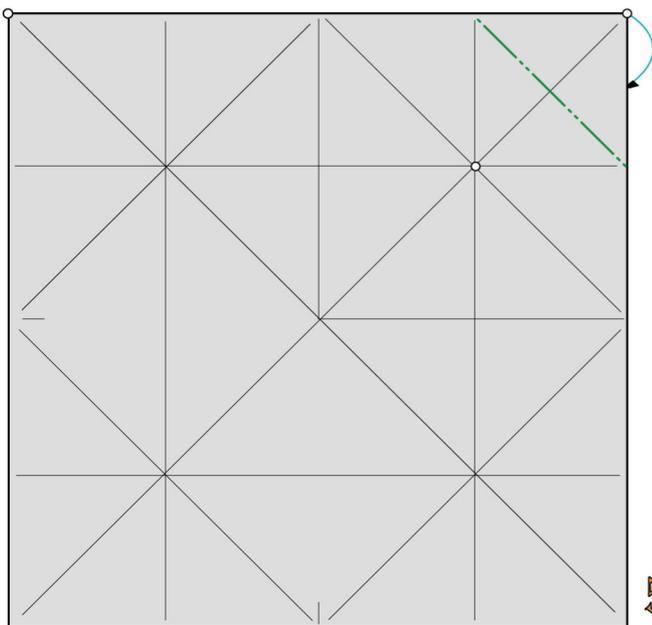
3



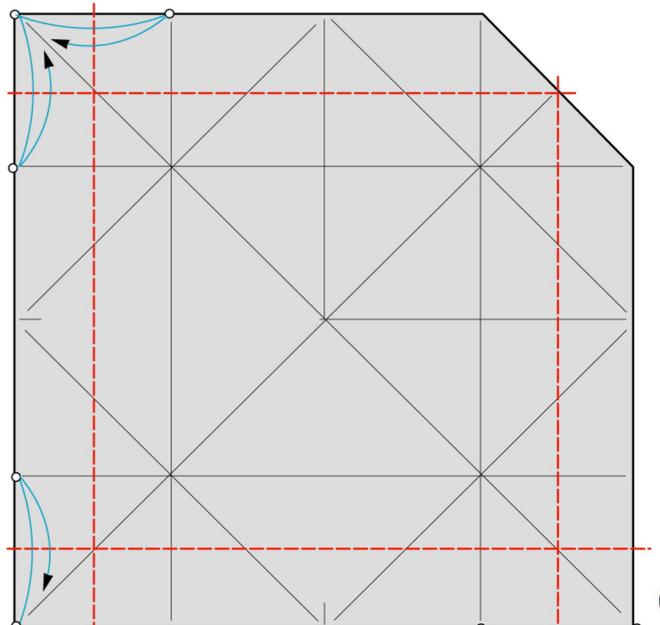
4

4 pieghe a monte

4 pieghe a valle



5

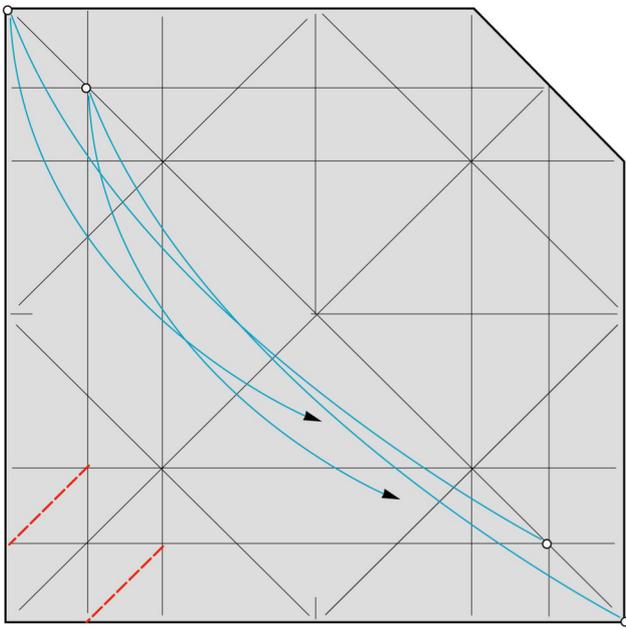


6

1 piega a monte

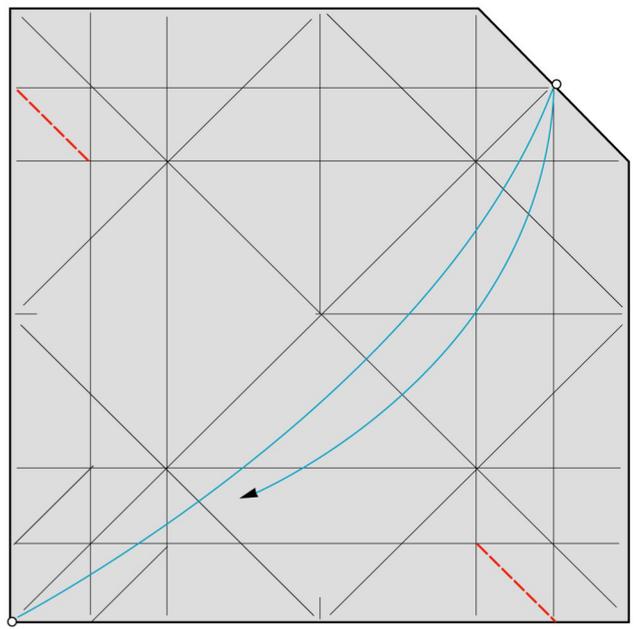
4 pieghe a valle

12



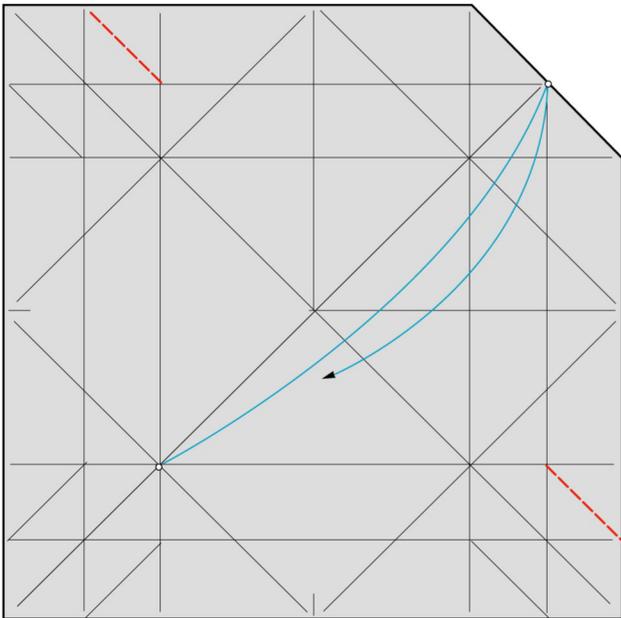
7

2 pieghe a valle



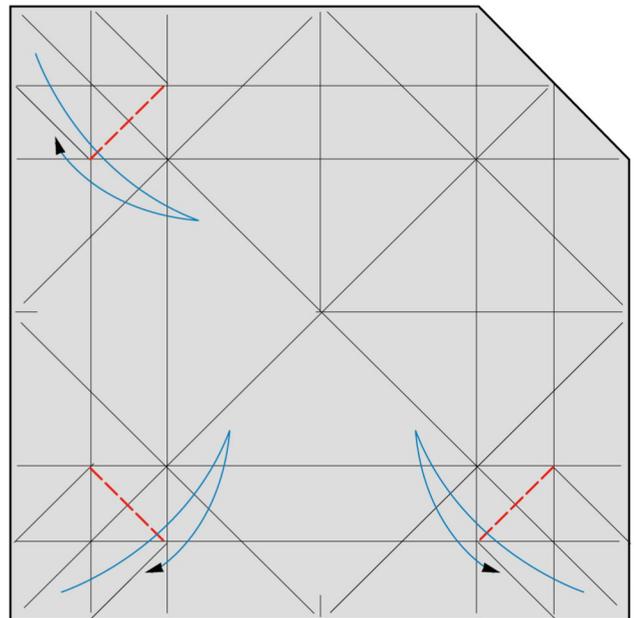
8

2 pieghe a valle



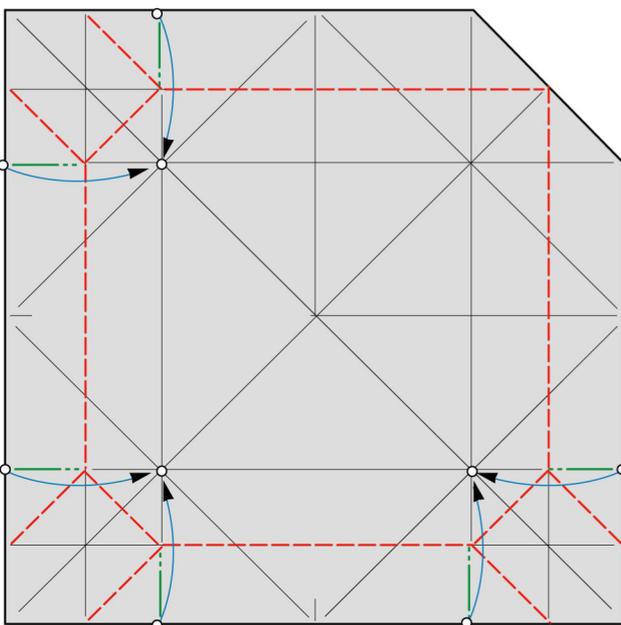
9

2 pieghe a valle



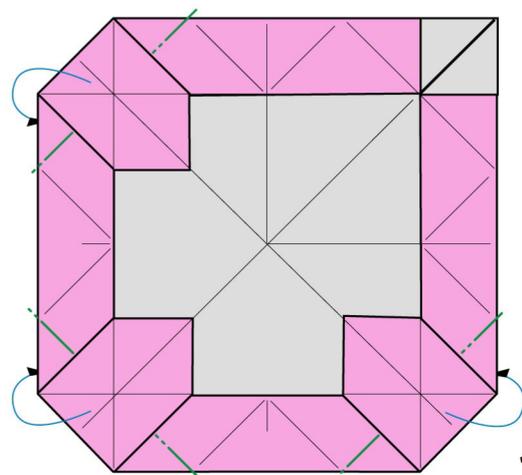
10

4 pieghe a valle



11

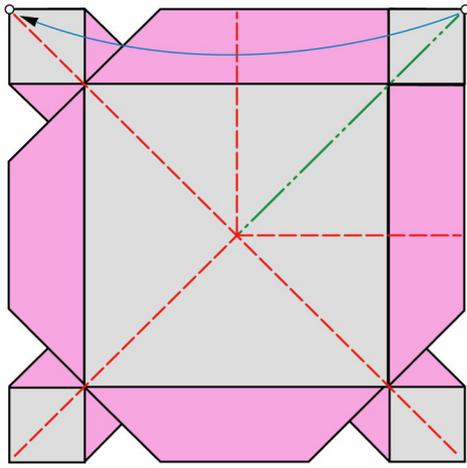
Ripiegate a valle e a monte



12

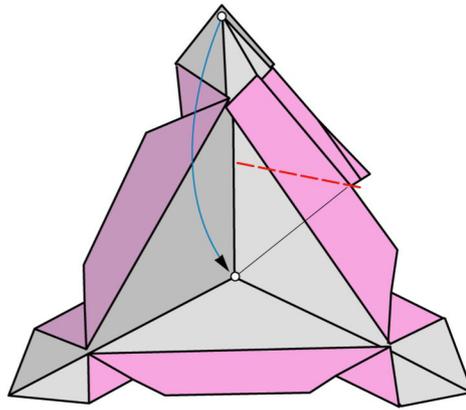
3 pieghe a monte

13



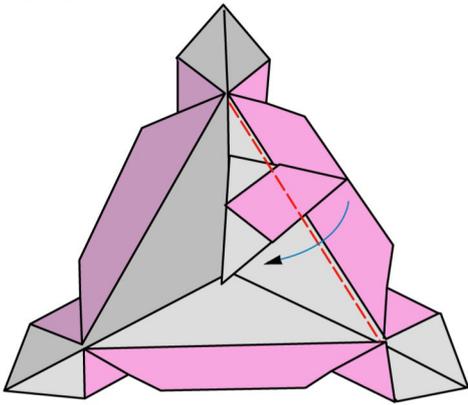
13

Ripiegate a valle e a monte modellando 3D



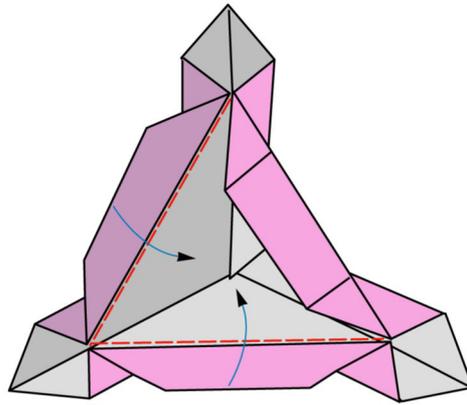
1 piega a valle

14



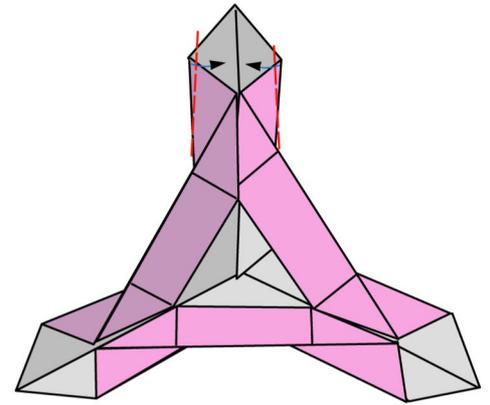
1 piega a valle

15



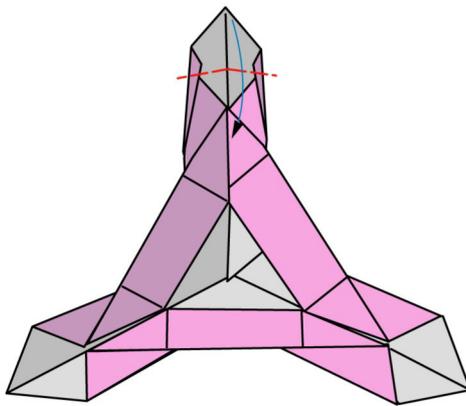
2 pieghe a valle

16



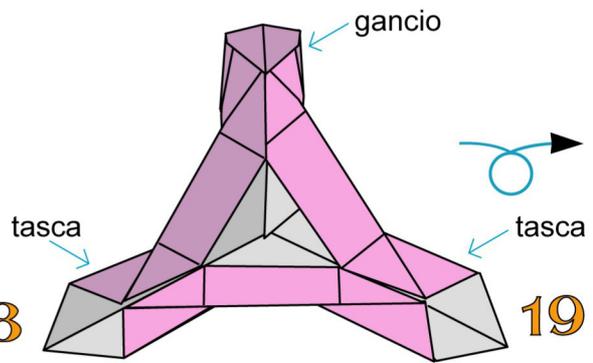
2 pieghe a valle

17



1 piega a valle

18

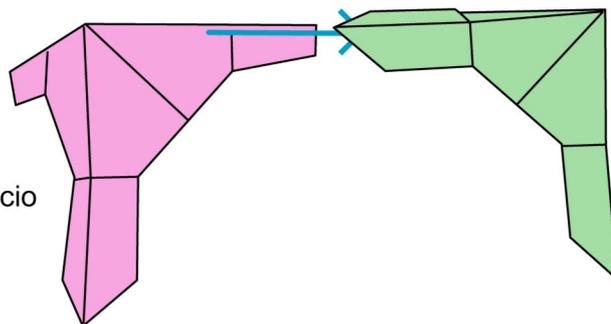


Modulo per cubo traforato ultimato

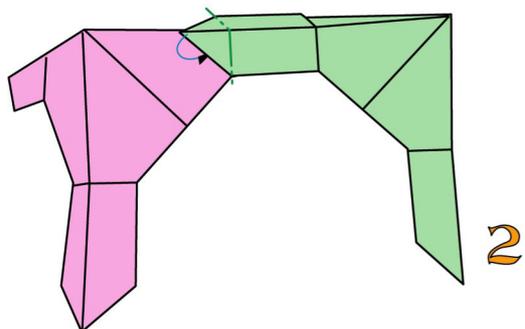
19

UNIONE DEI MODULI

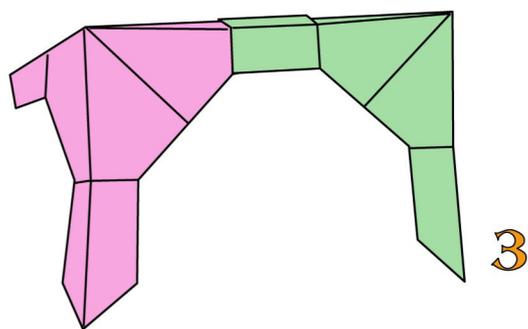
Inserite l'estremità a gancio  
entro l'estremità a tasca  
di un altro modulo



1



Mediante una piega a monte bloccate l'unione



Unione di 2 moduli completata



Composizione tridimensionale ottenuta unendo 2 cubi traforati e 4 prismi a base triangolare traforati per un totale di 40 moduli

# SISTEMA COSTRUTTIVO "CONNECT"

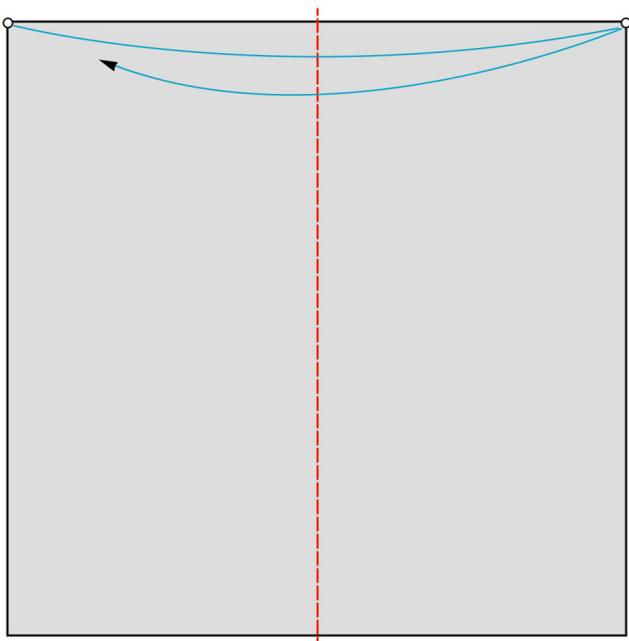
**Franco Pavarin 24**

Per costruzioni modulari cubiche traforate di vario tipo. Il modulo cubico base è composto da 8 fogli di carta monocolore di medio peso delle dimensioni di cm 10x10 e 8 foglietti monocolori di cm 5x5

For various perforated cubic modular constructions guy. The basic cubic module is made up of 8 sheets of single-colour paper of medium weight of dimensions measuring 10x10 cm and 8 single-colour sheets measuring 5x5 cm

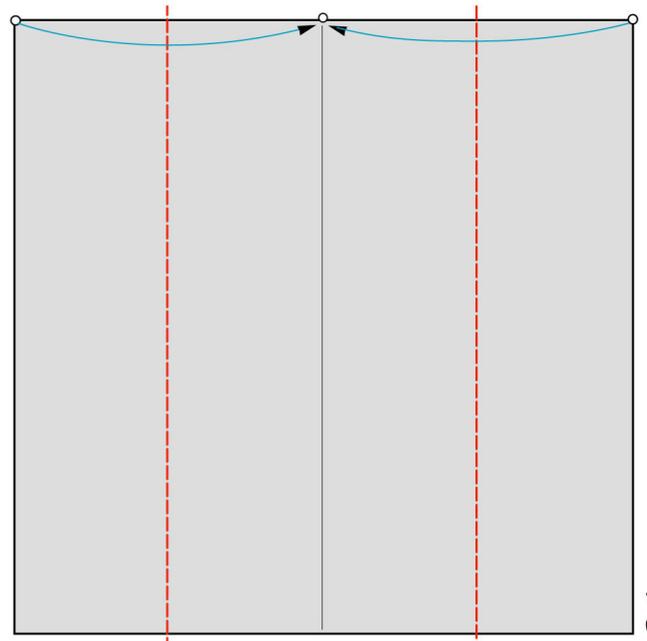


MODULO "CONNECT" SINISTRO- 4 fogli



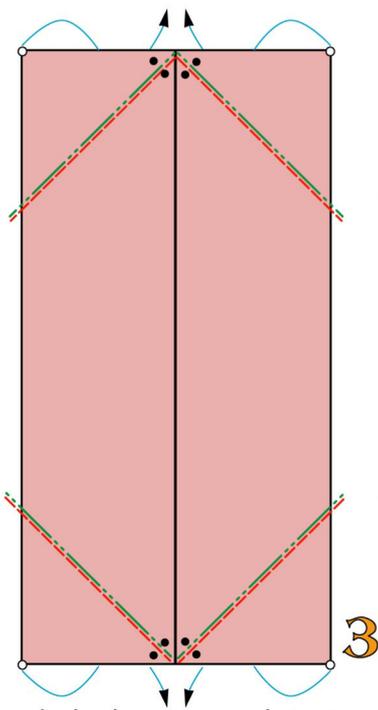
1 piega a valle

1



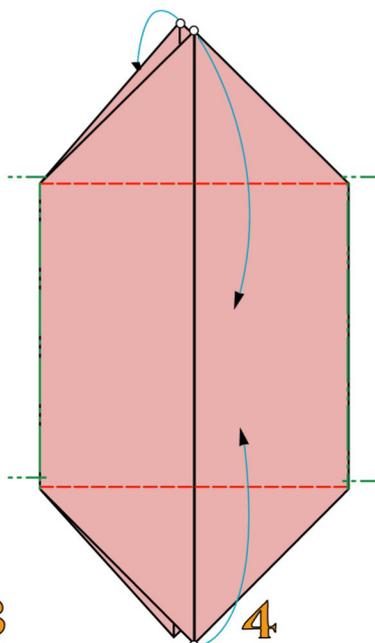
2 pieghe a valle

2



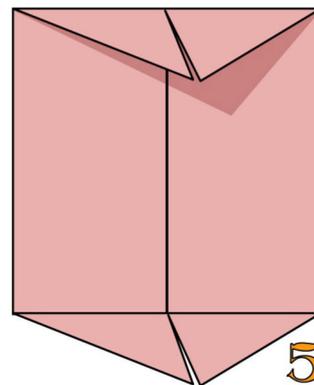
4 pieghe rovesce interne

3



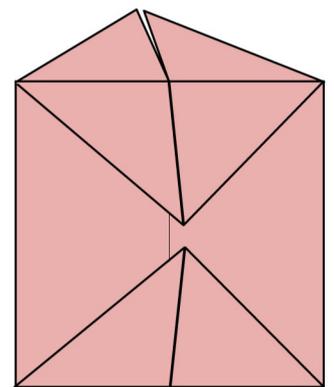
4 pieghe a valle,  
2 per lato

4

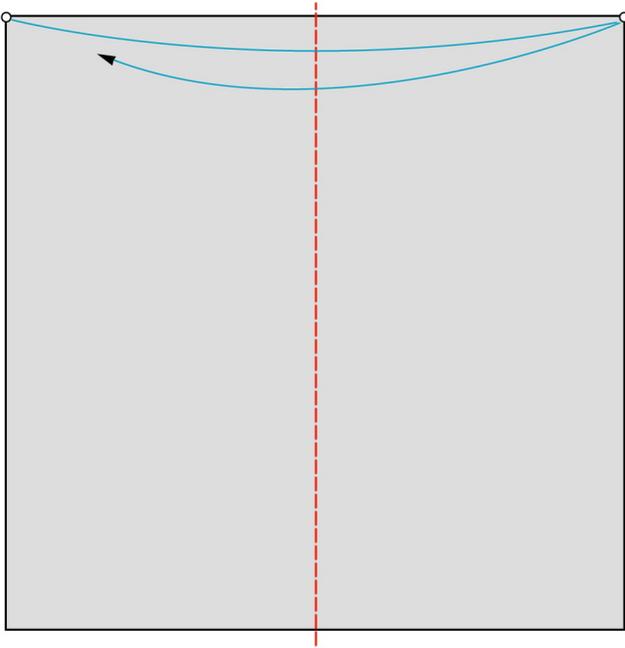


5

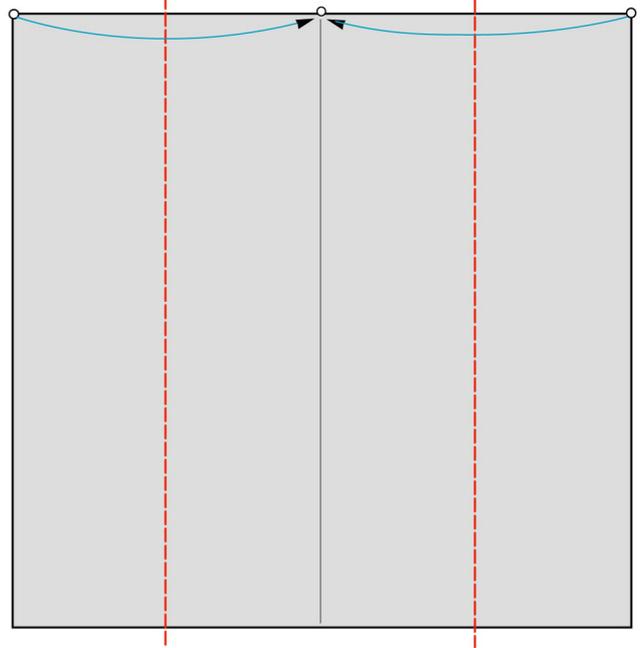
Modulo "connect" sinistro  
ultimato. Ribaltate



6



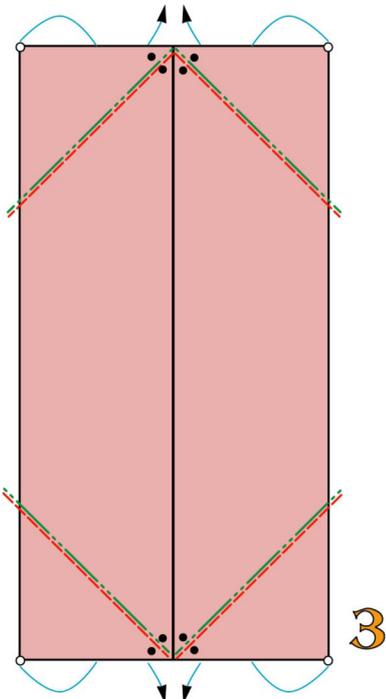
1



2

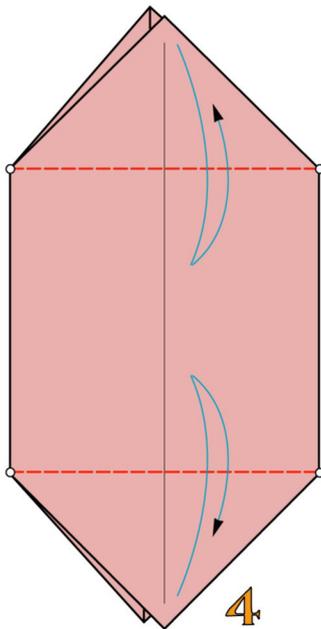
1 piega a valle

2 pieghe a valle



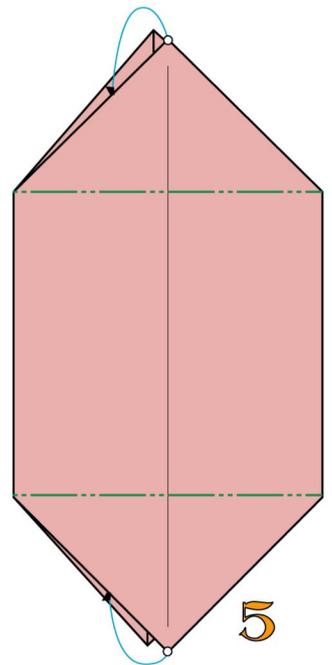
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4 pieghe rovesce interne



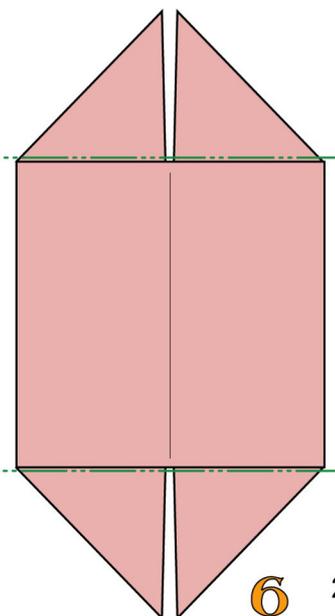
4

2 pieghe a valle



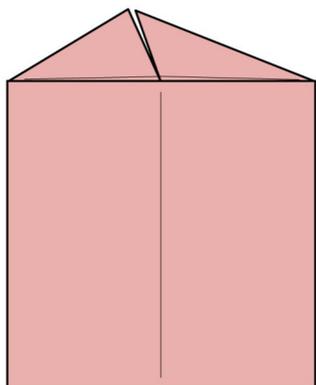
5

2 pieghe rovesce interne



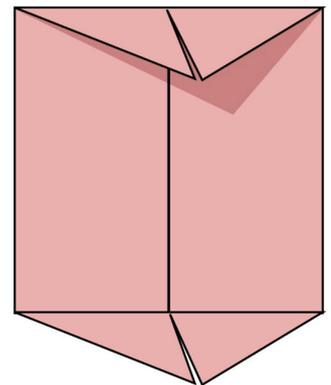
6

2 pieghe a monte



7

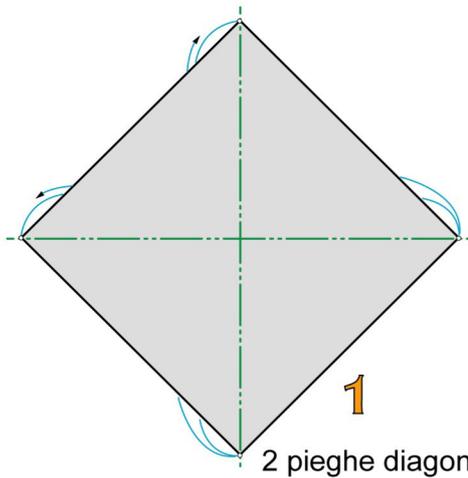
Modulo "connect" destro ultimato. Ribaltate



8

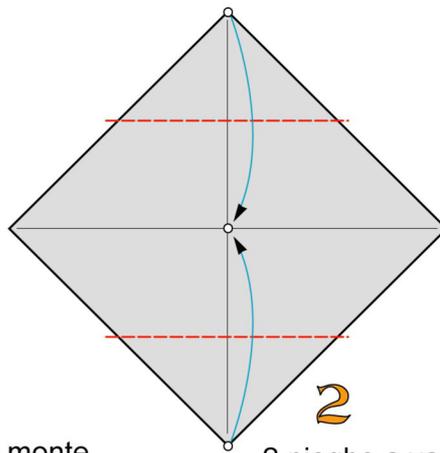
18

COSTRUZIONE MODULO DI BLOCCAGGIO (Uguale ad orecchino 2 in "Compos. modulare 4")



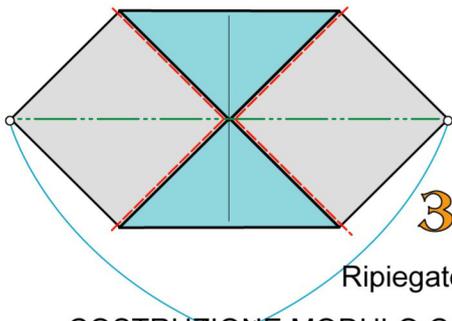
1

2 pieghe diagonali a monte



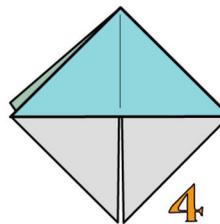
2

2 pieghe a valle



3

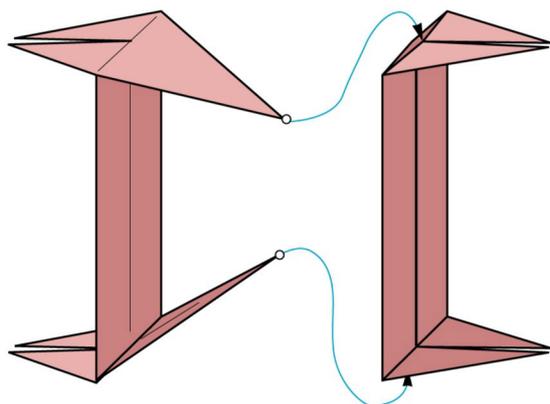
Ripiegate a valle e a monte



4

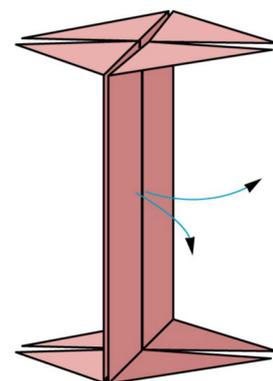
Modulo di bloccaggio ultimato

COSTRUZIONE MODULO COMPOSTO "CONNECT"



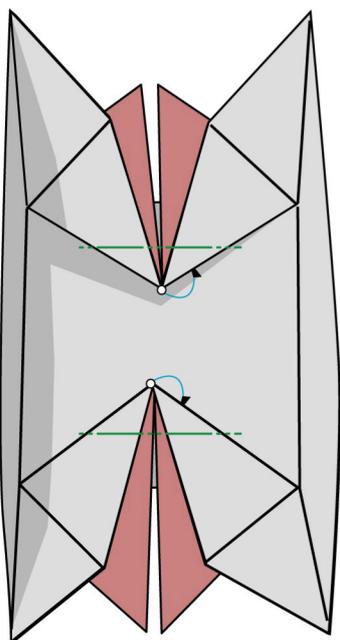
1

Inserite i vertici del modulo sinistro entro le tasche del modulo destro



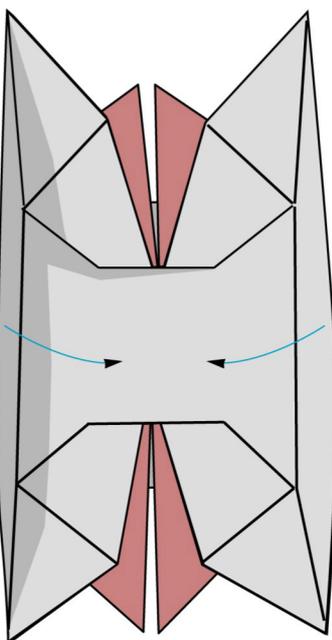
2

Aprite



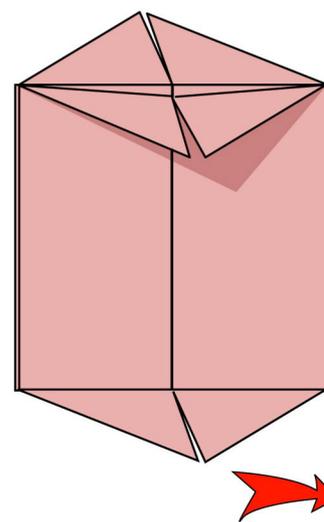
3

2 pieghe a monte interne



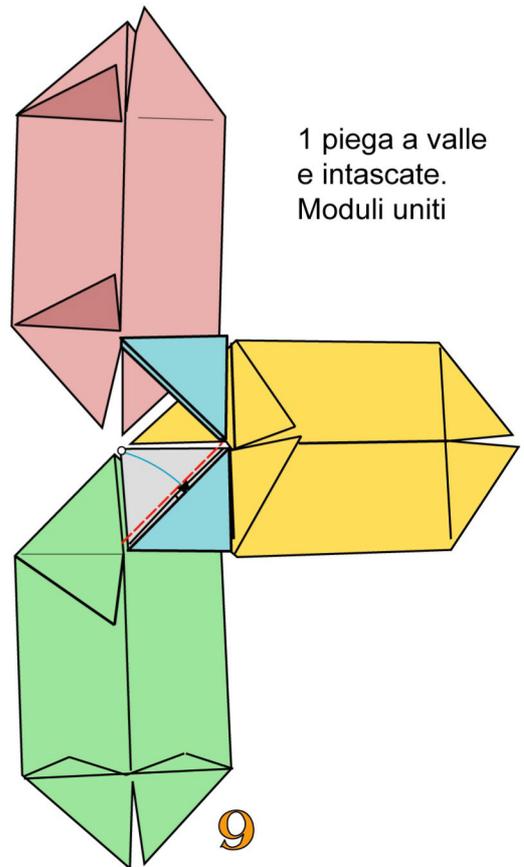
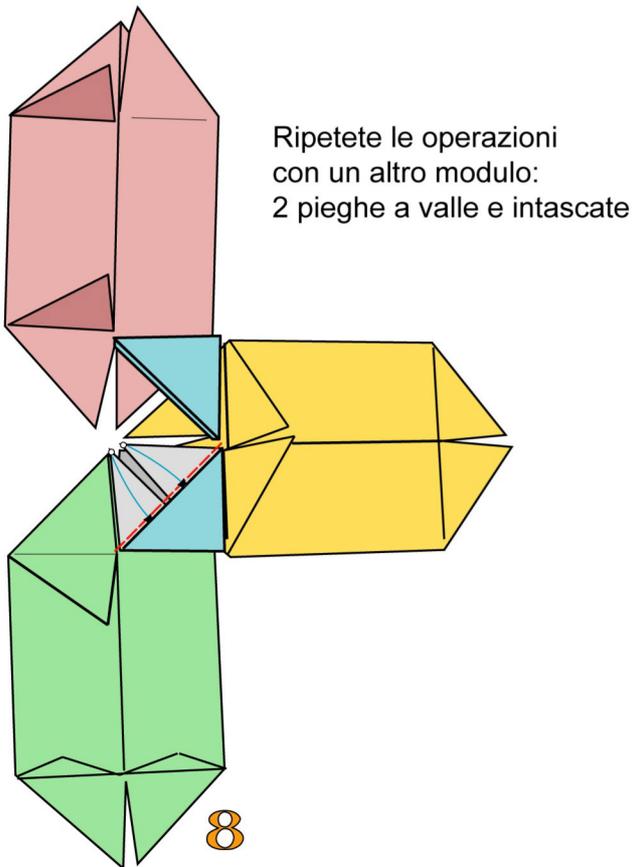
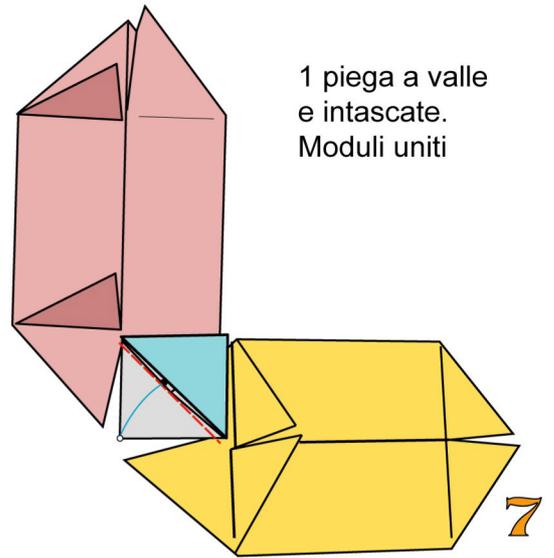
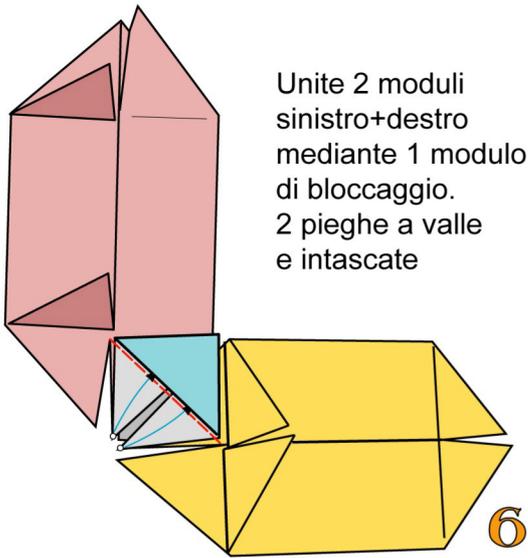
4

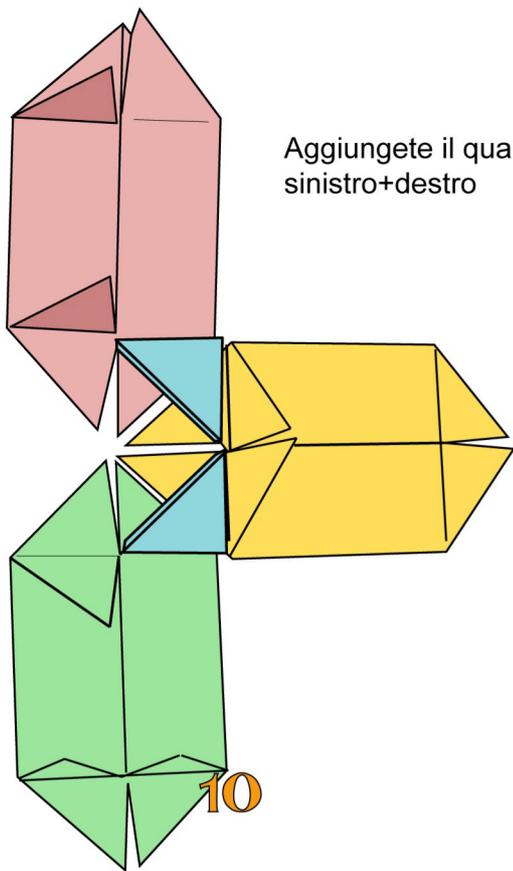
Richiudete



5

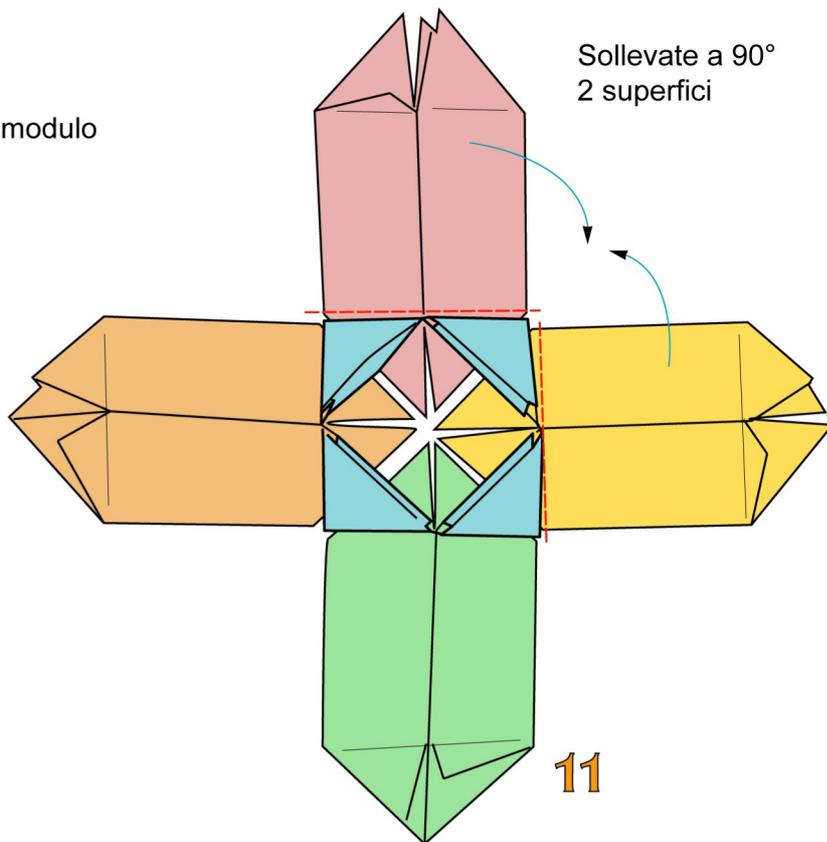
Costruite 4 di questi moduli sinistro + destro





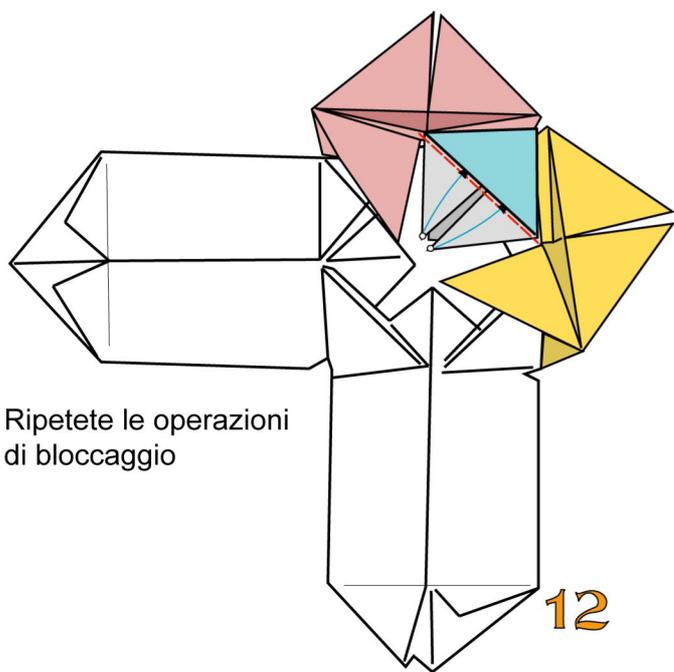
Aggiungete il quarto modulo  
sinistro+destra

10



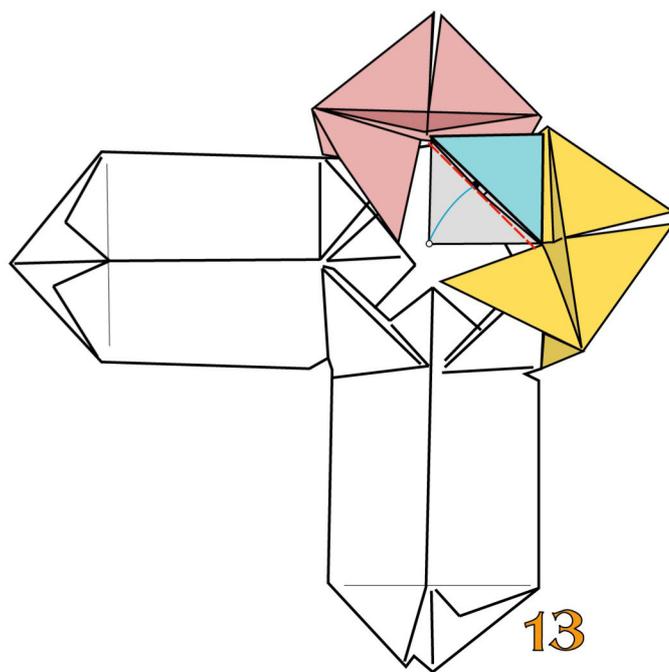
Sollevate a 90°  
2 superfici

11

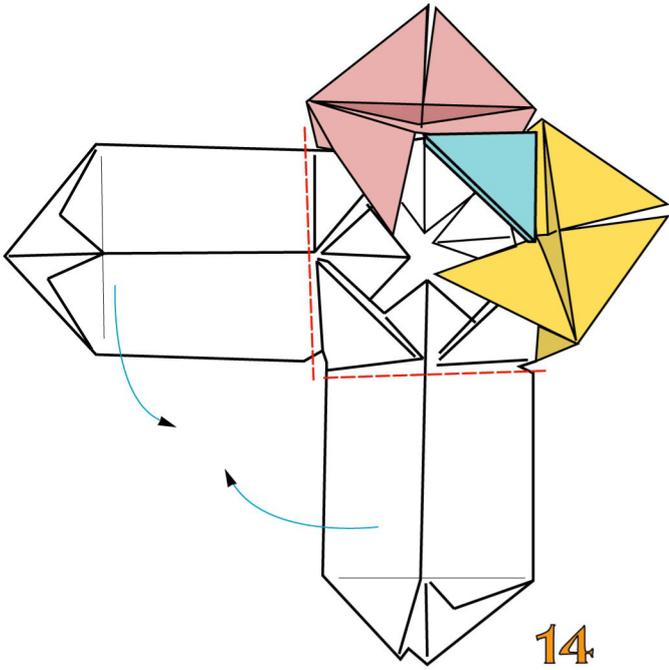


Ripetete le operazioni  
di bloccaggio

12

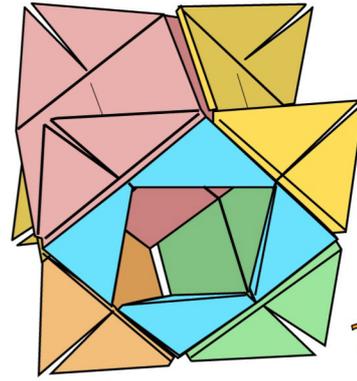


13



14

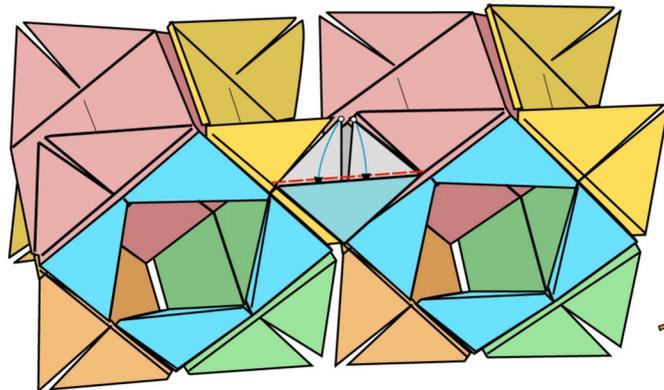
Sollevare le altre 2 superfici e ripetete le solite operazioni



15

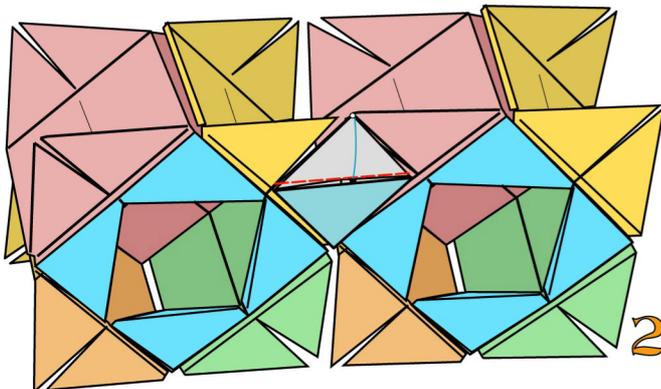
Modulo composto cubico-base "connect" ultimato

UNIONE DI 2 MODULI CUBICI BASE "CONNECT"



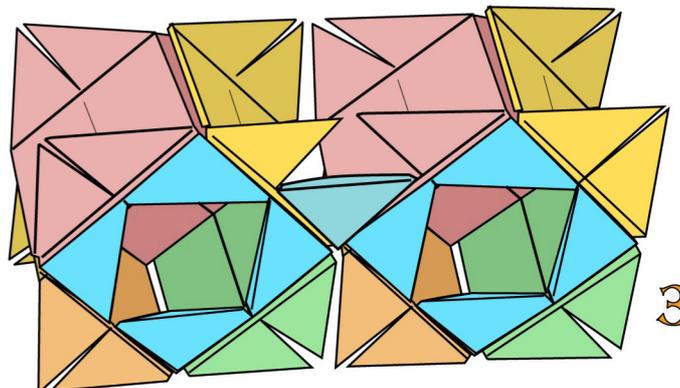
1

Mediante un modulo di bloccaggio unite 2 moduli base. 2 pieghe a valle e intascate



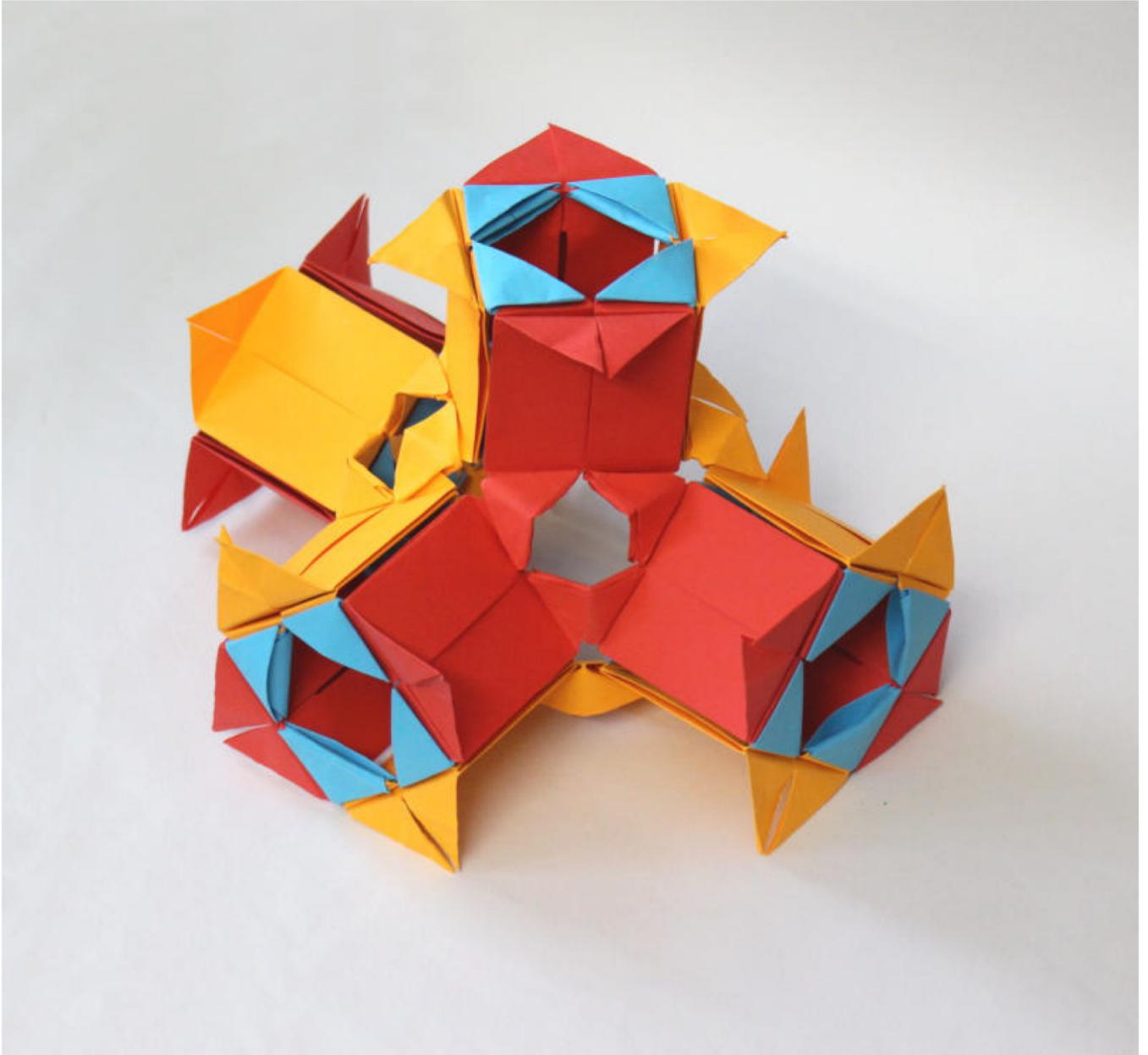
2

1 piega a valle e intascate.



3

Ripetete l'operazione altre 3 volte e l'unione sarà completata



# Poliedro di supporto

**Franco Pavarin 24**

Si tratta di un sistema costruttivo che permette la realizzazione di molti poligoni.

La sua particolarità è che in ogni asta è presente una tasca superiore che permette l'inserimento di un elemento decorativo, che può essere floreale o geometrico.

Verranno presentati poliedri realizzati con questo tipo di moduli composti.

In questo caso si tratta di un icosaedro, realizzato con 30 fogli monocolori di medio peso delle dimensioni di cm 10x5

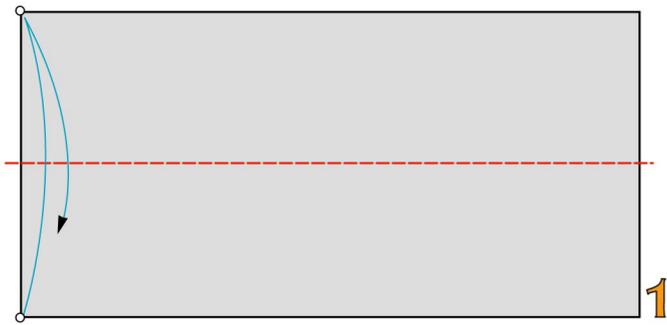
It is a construction system that allows the creation of many polygons.

Its peculiarity is that in each rod there is an upper pocket that allows insertion of a decorative element, which can be floral or geometric.

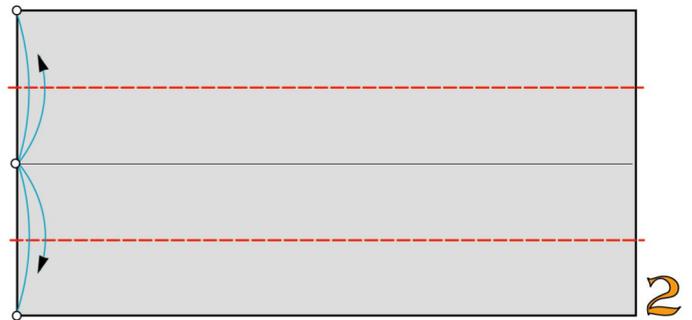
Polyhedra made with this will be presented type of composed modules.

In this case it is an icosahedron, realized with 30 medium weight single color sheets dimensions 10x5 cm

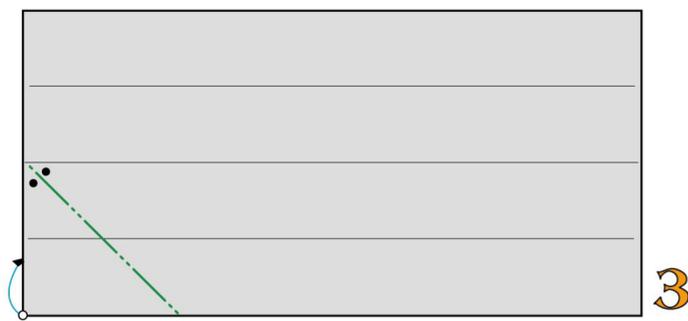




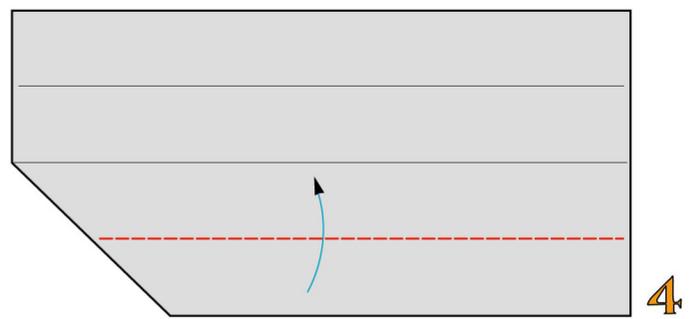
1 piega a valle



2 pieghe a valle



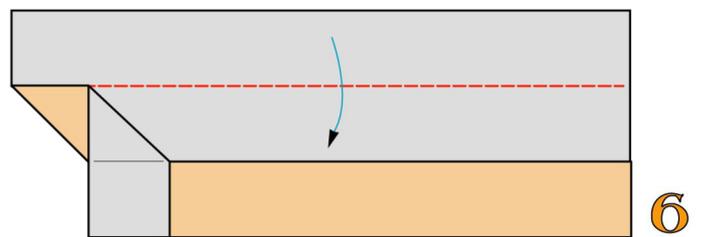
1 piega bisettrice a monte



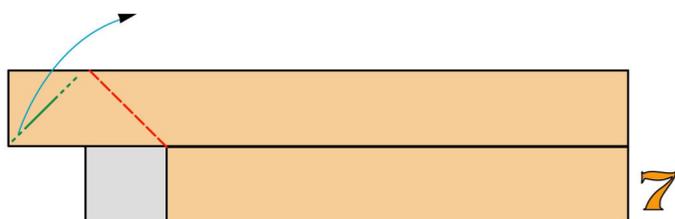
Ripiegate a valle



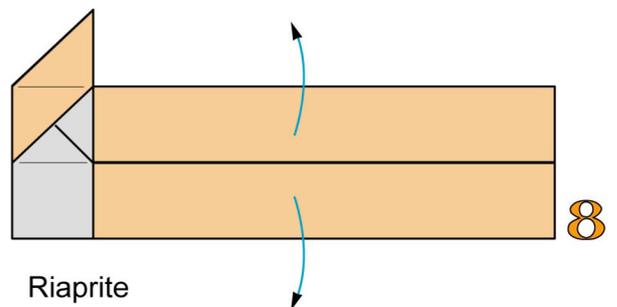
1 piega bisettrice a valle



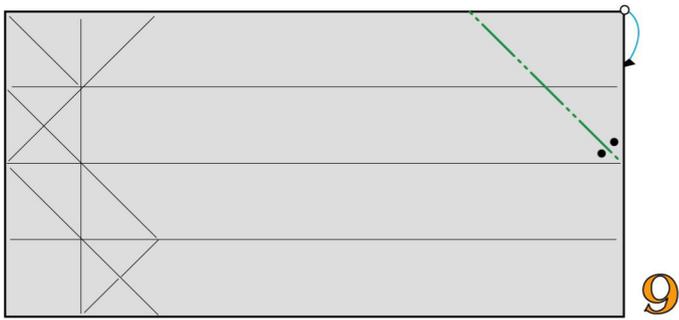
Ripiegate a valle



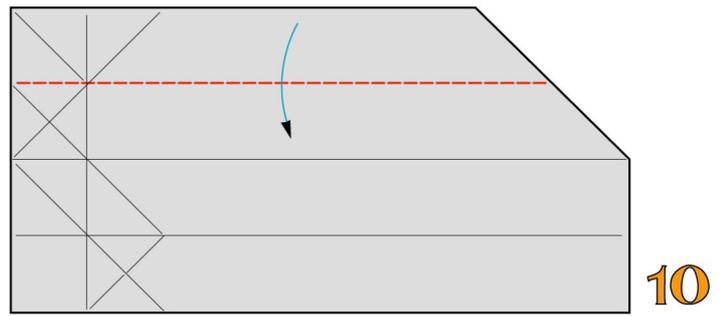
1 piega a valle e 1 a monte



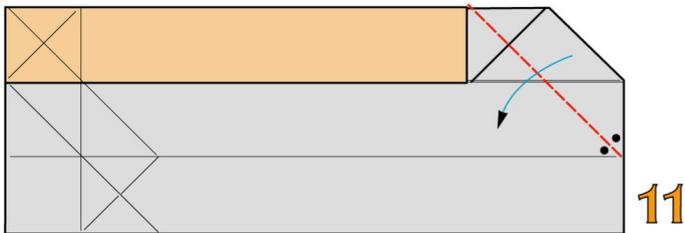
Riaprite



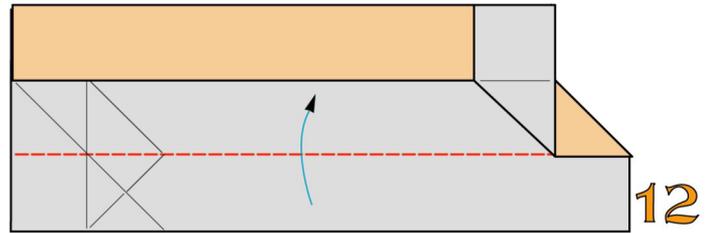
1 piega bisettrice a monte



Ripiegate a valle



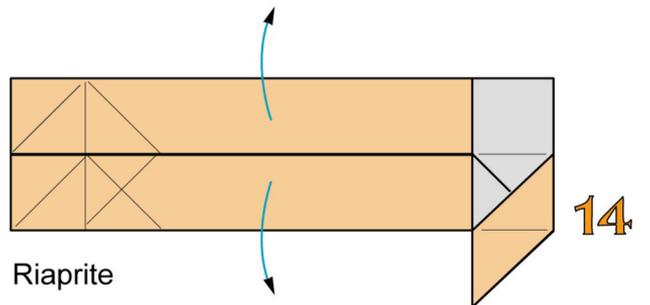
1 piega bisettrice a valle



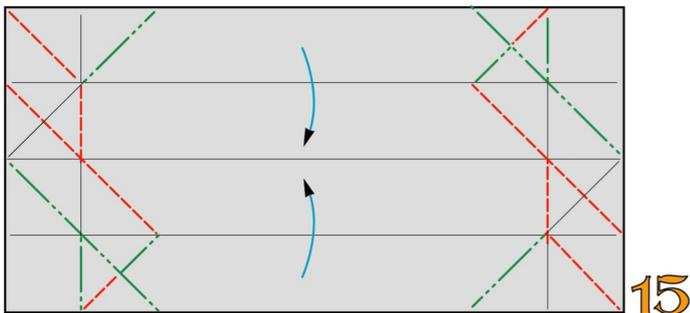
Ripiegate a valle



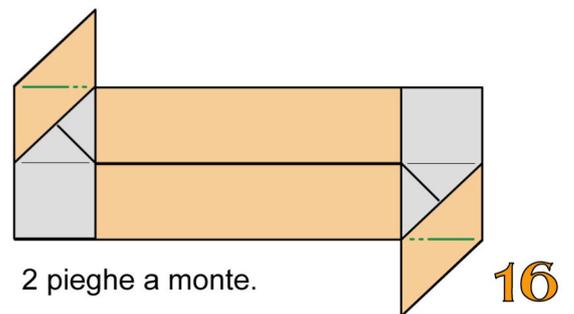
1 piega a valle e 1 a monte



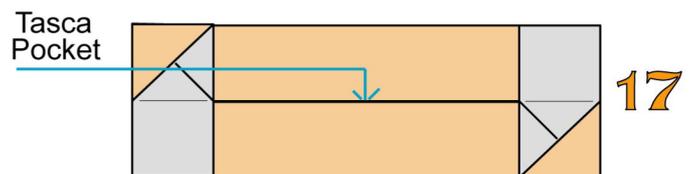
Riaprite



Ripiegate a valle e a monte

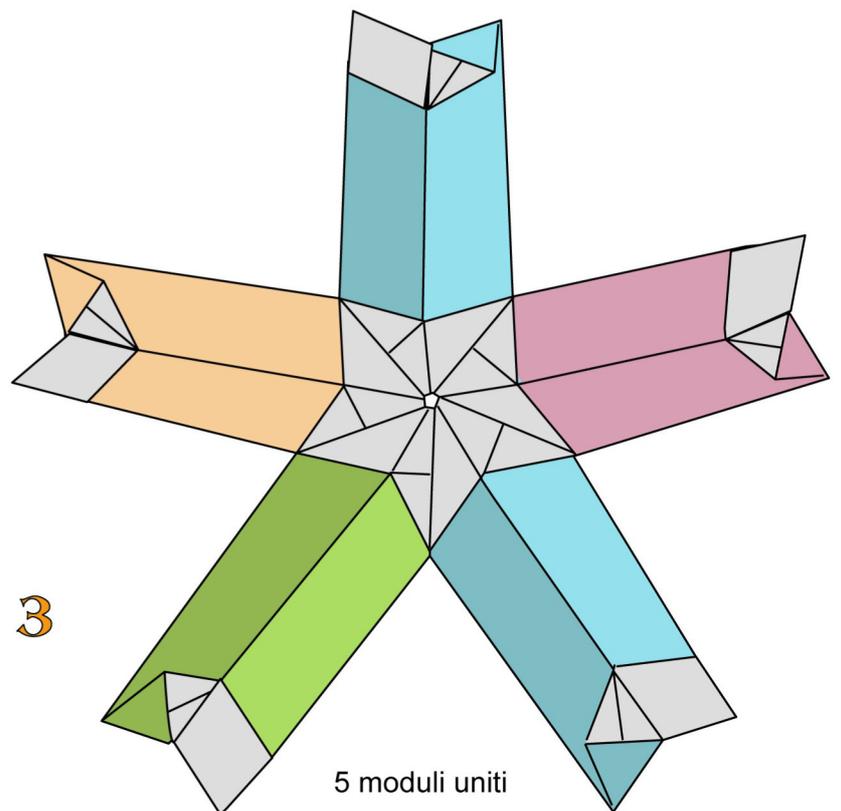
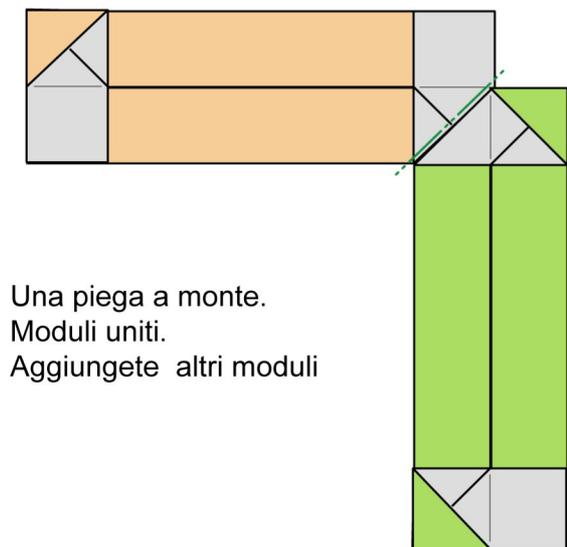
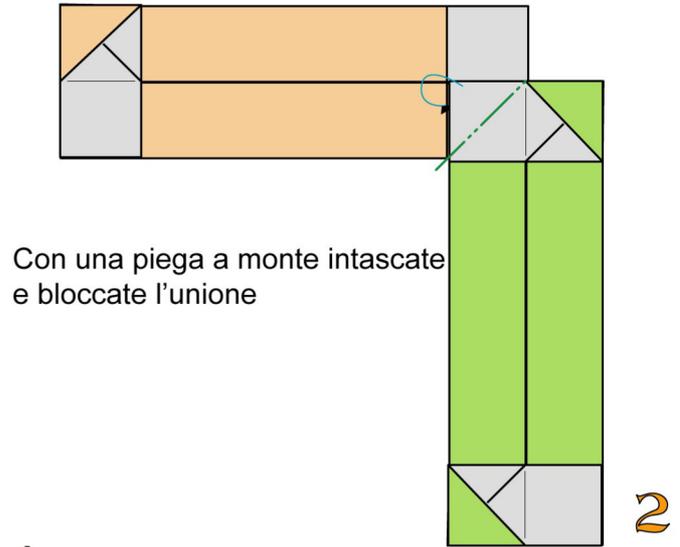
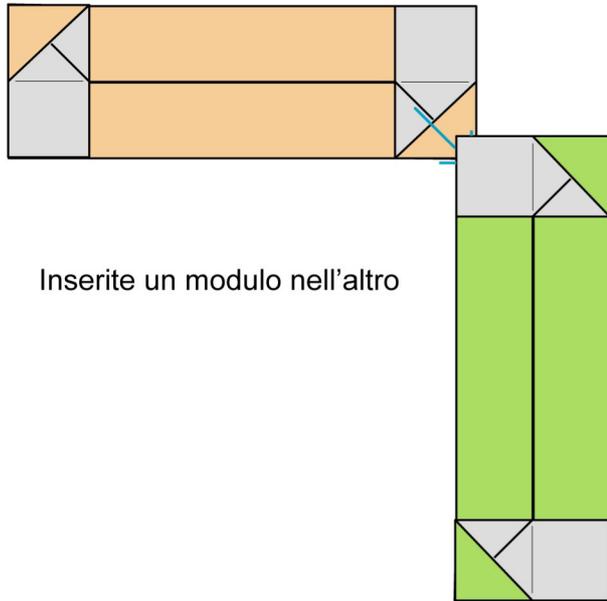


2 pieghe a monte.



Modulo di supporto ultimato

## UNIONE DEI MODULI



# POLIEDRO "A" MODULARE TRAFORATO

## Franco Pavarin 24

Sistema costruttivo che permette la realizzazione di molti tipi di poliedri; in questo caso si tratta di un cubottaedro, con 8 facce triangolari e 6 facce quadrate.

Si utilizza il modulo esagonale del "nastro multiforme" per costruire 24 spigoli con carta di medio peso delle dimensioni di cm 8x8.

Si utilizza il modulo di bloccaggio degli "orecchini 2" per costruire 12 vertici con 48 fogli con carta di medio peso delle dimensioni di cm 4x4.

Construction system that allows the creation of many types of polyhedra; in this case it is a cuboctahedron, with 8 triangular faces and 6 square faces.

The hexagonal module of the "multiform ribbon" is used to construct 24 edges with medium weight paper measuring 8x8 cm.

The "earrings 2" blocking module is used to construct 12 vertices with 48 sheets of medium weight paper measuring 4x4 cm.

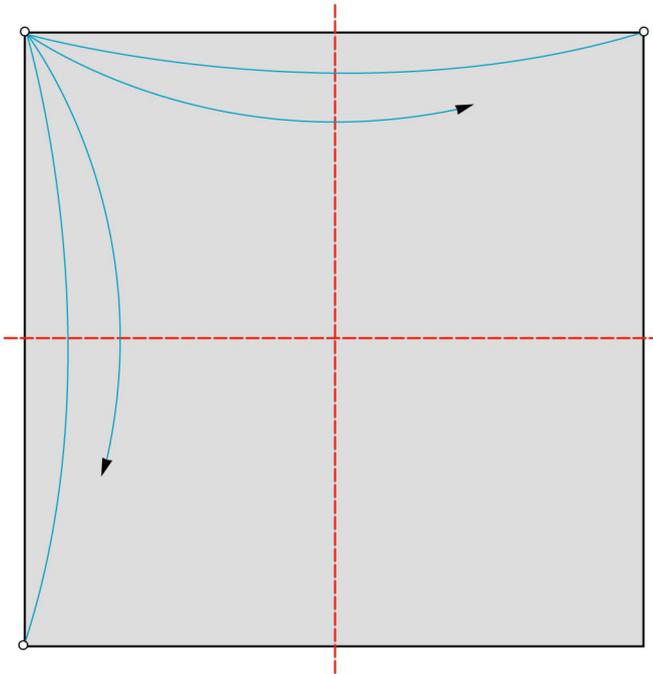
Sistema constructivo que permite la creación de muchos tipos de poliedros; en este caso es un cubottaedro, con 8 caras triangulares y 6 caras cuadradas.

El módulo hexagonal de la "cinta multiforme" se utiliza para construir 24 aristas con papel de gramaje medio de 8x8 cm.

El módulo de bloqueo "pendientes 2" se utiliza para construir 12 vértices con 48 hojas de papel de gramaje medio de 4x4 cm.

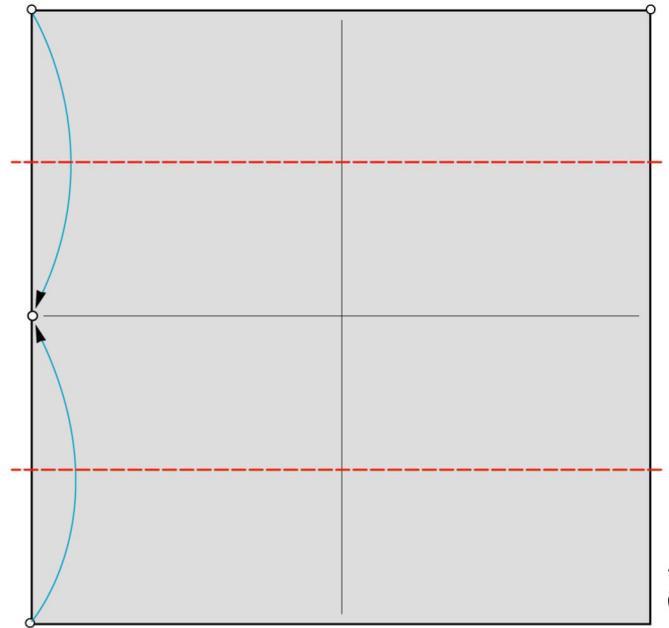


MODULO PER NASTRI ESAGONALE



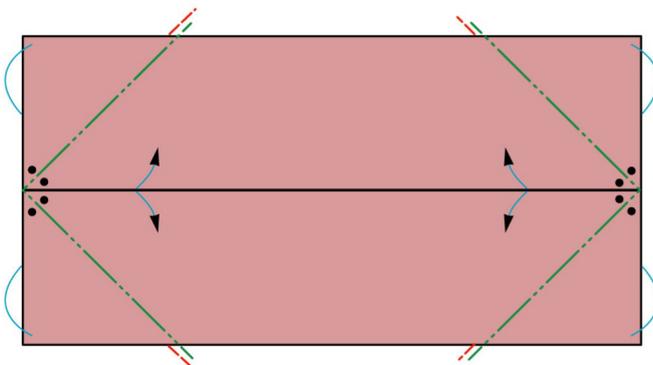
2 pieghe a valle

1



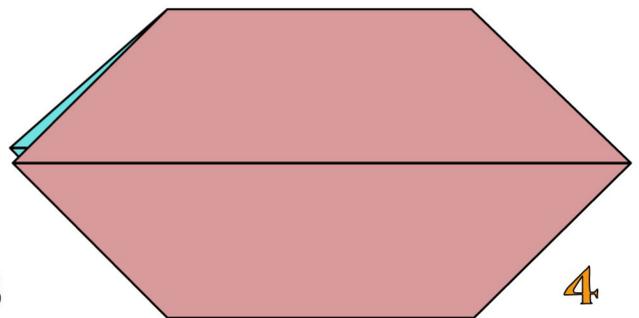
2 pieghe a valle

2



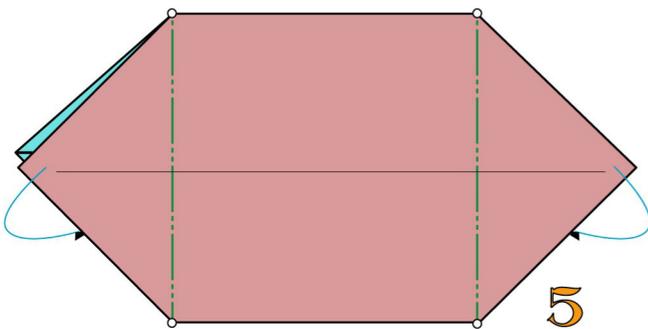
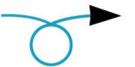
2 pieghe rovesce interne

3



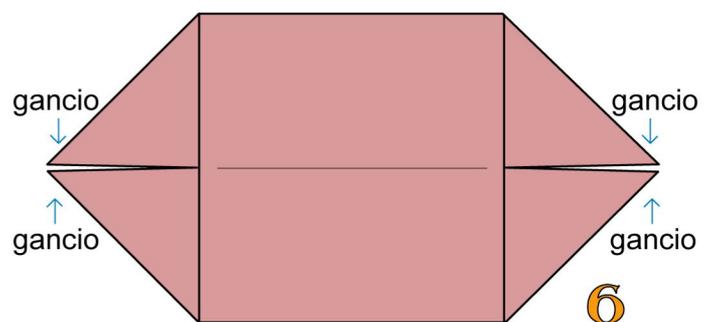
Ribaltate

4



2 pieghe rovesce interne

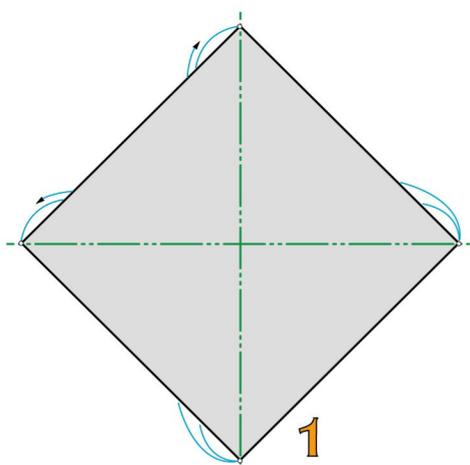
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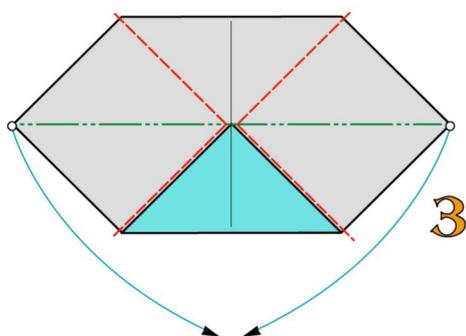
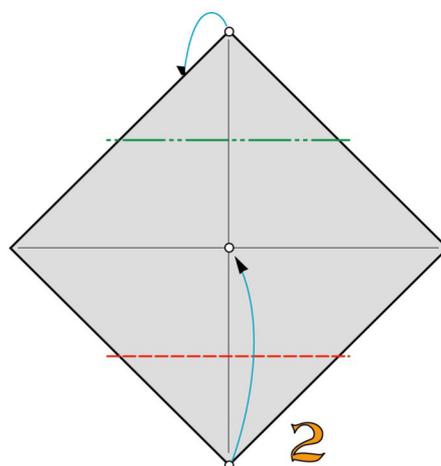
Modulo per nastri esagonale ultimato

6

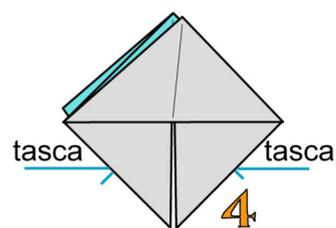
## COSTRUZIONE MODULO DI BLOCCAGGIO PER "ORECCHINO 2"



2 pieghe diagonali a monte

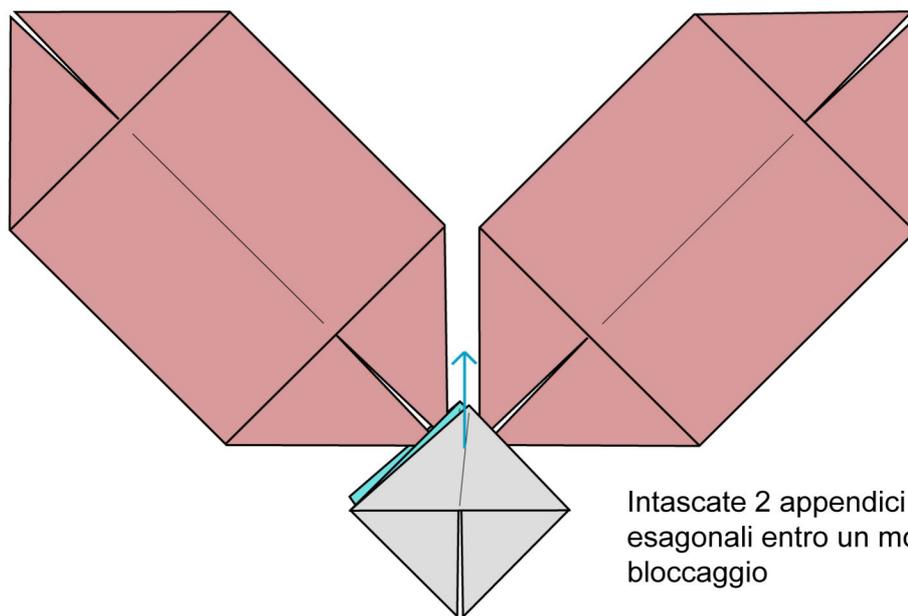


Ripiegate a valle e a monte

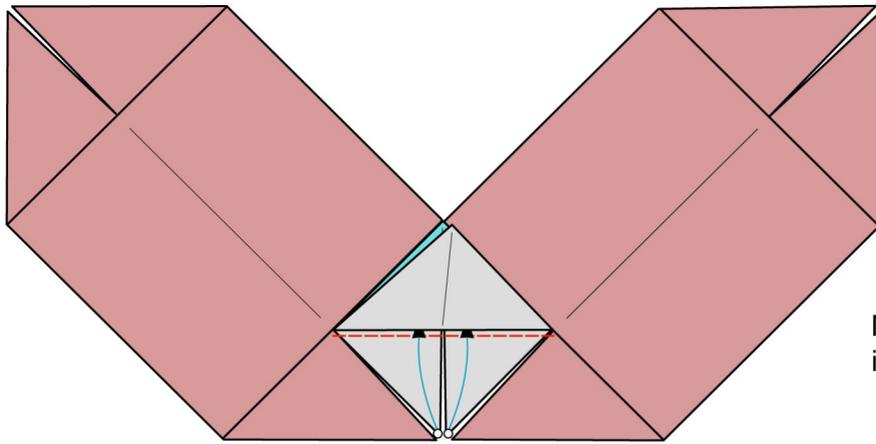


Modulo di bloccaggio per  
"Poliedro A" ultimato

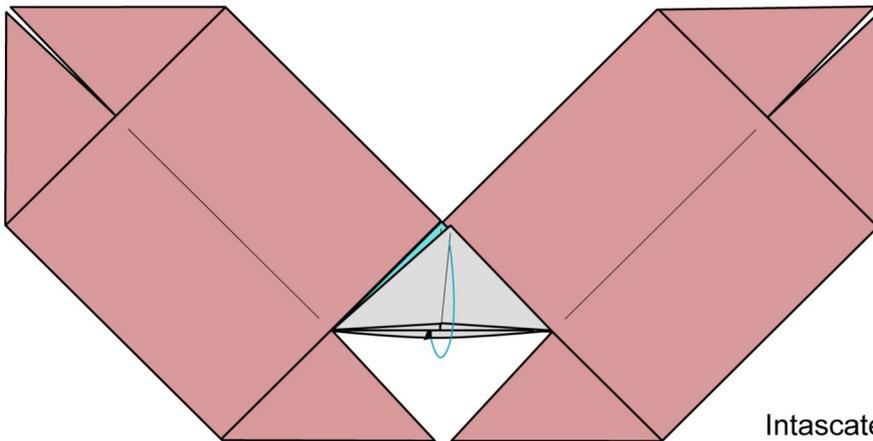
## UNIONE DEI MODULI



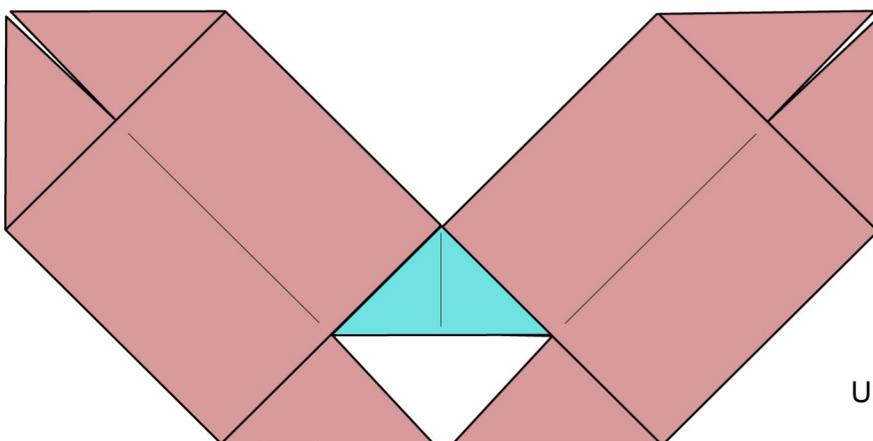
Intascate 2 appendici di 2 moduli  
esagonali entro un modulo di  
bloccaggio



Mediante una piega a valle  
intascate i vertici indicati



Intascate la superficie triangolare indicata



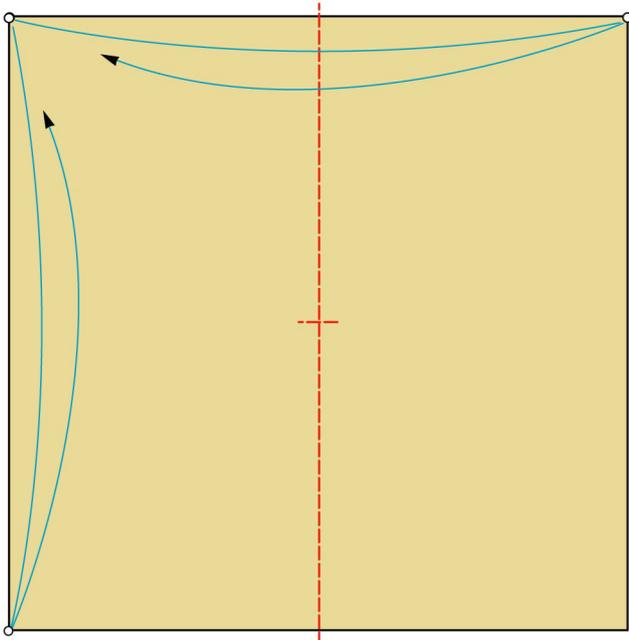
Unione dei moduli completata

# POLIEDRO "B" MODULARE TRAFORATO

**Franco Pavarin 24**

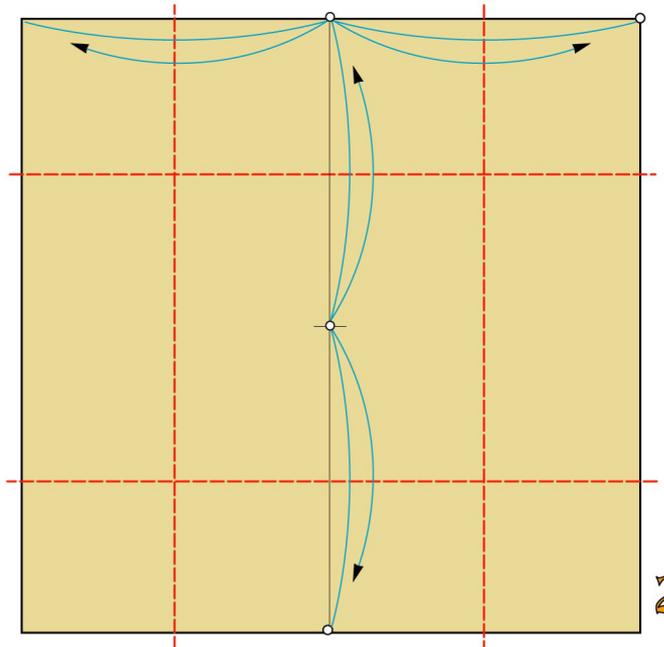
Con questo modulo è possibile costruire molti poligoni.  
In questo caso si tratta di un dodecaedro, con 12 facce pentagonali e 30 spigoli.  
Adoperate 30 fogli di carta di medio peso delle dimensioni di almeno cm 10x10.  
Costruzione laboriosa e per piegatori esperti.





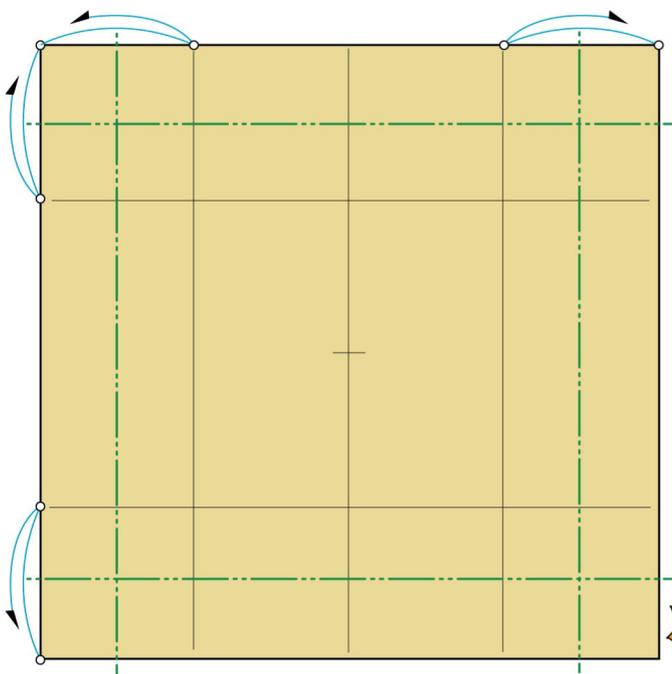
1

2 pieghe a valle, di cui 1 piccola



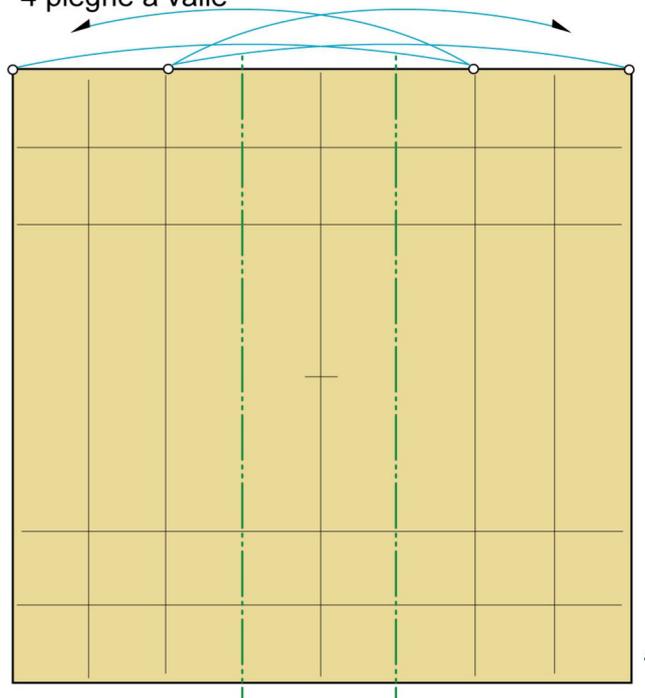
2

4 pieghe a valle



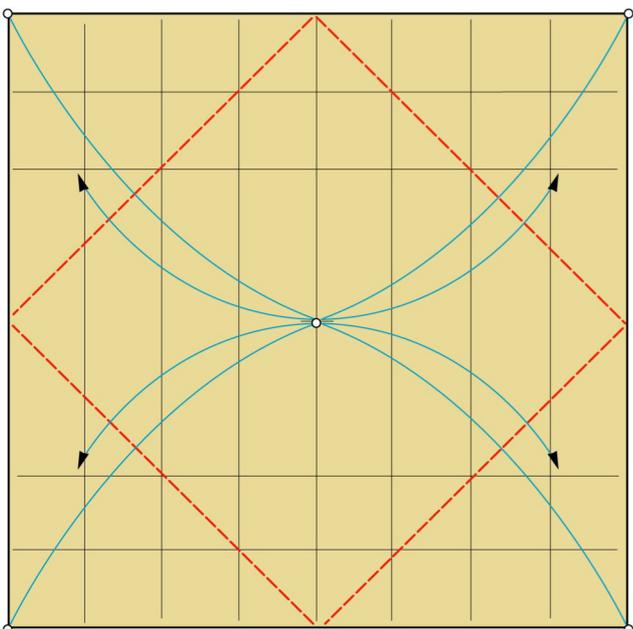
3

4 pieghe a monte



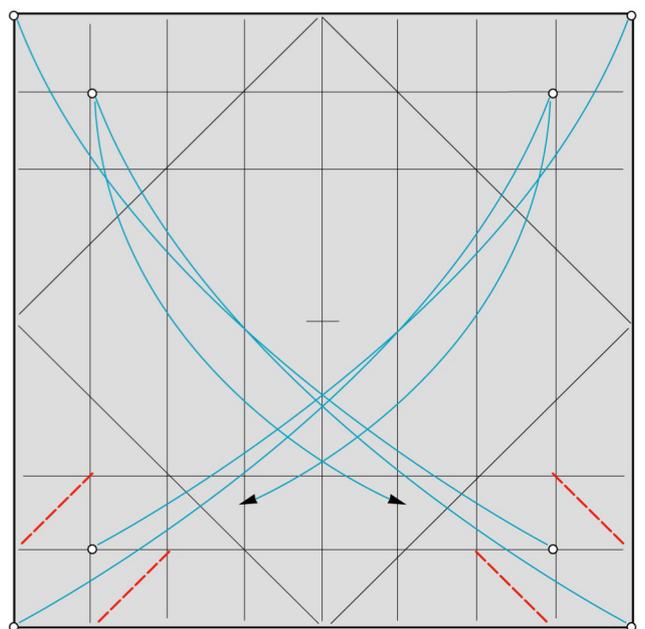
4

2 pieghe a monte



5

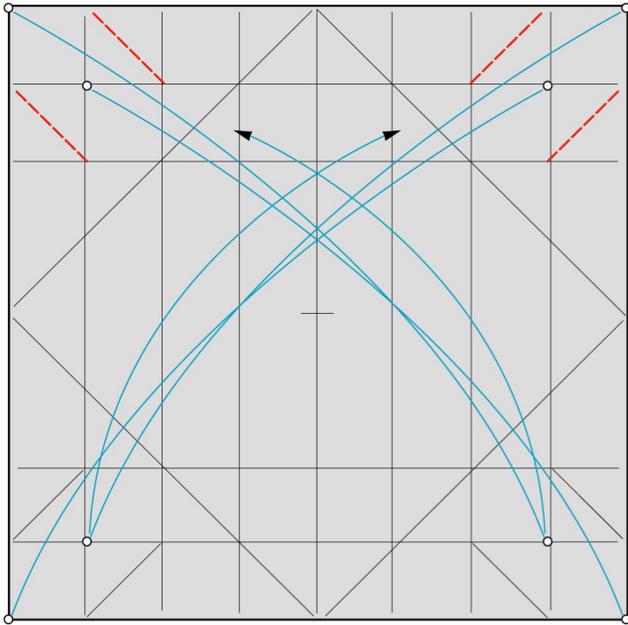
4 pieghe a valle e ribaltate



6

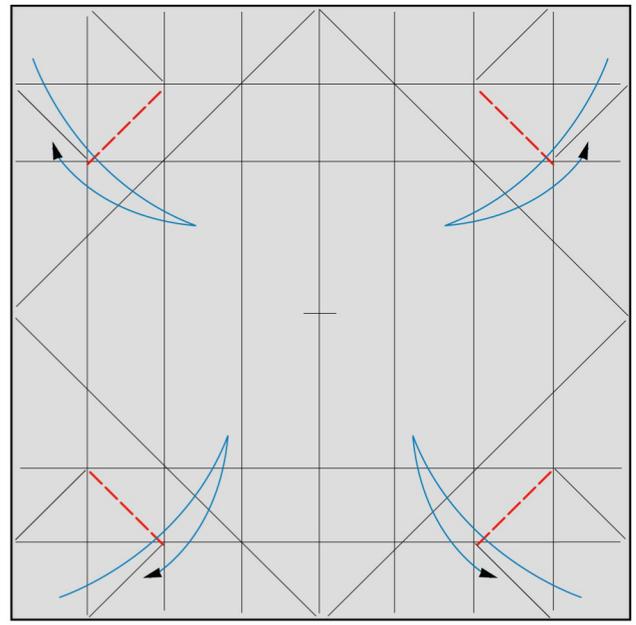
4 pieghe a valle





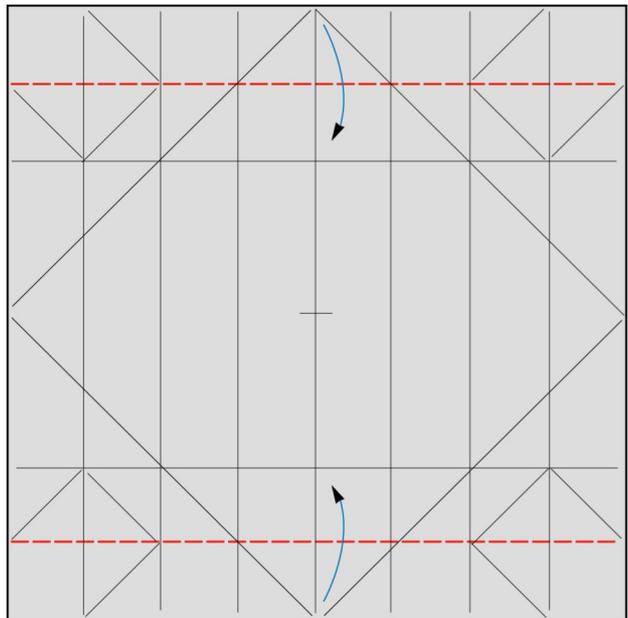
7

4 pieghe a valle

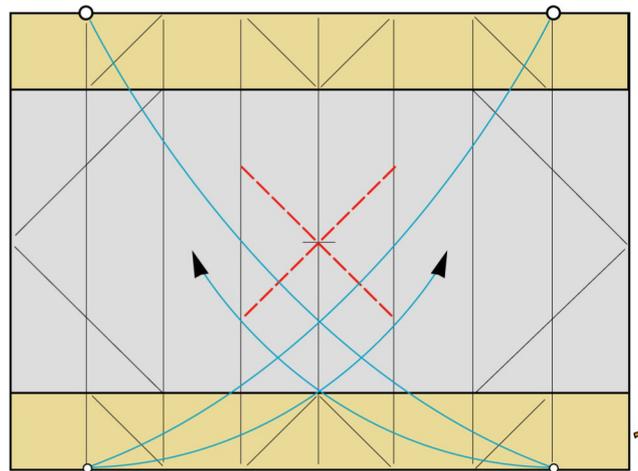


8

4 pieghe a valle

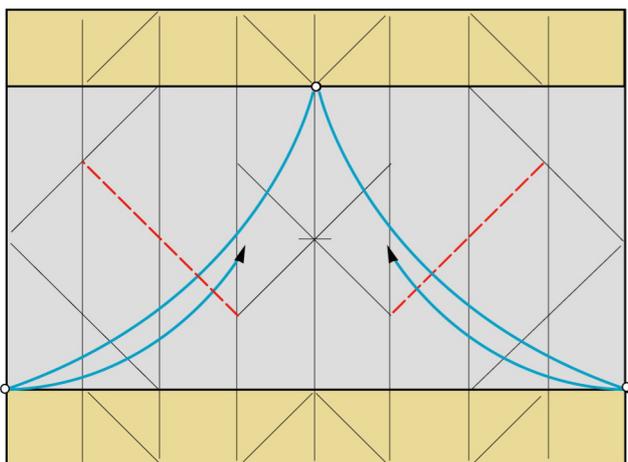


2 pieghe a valle



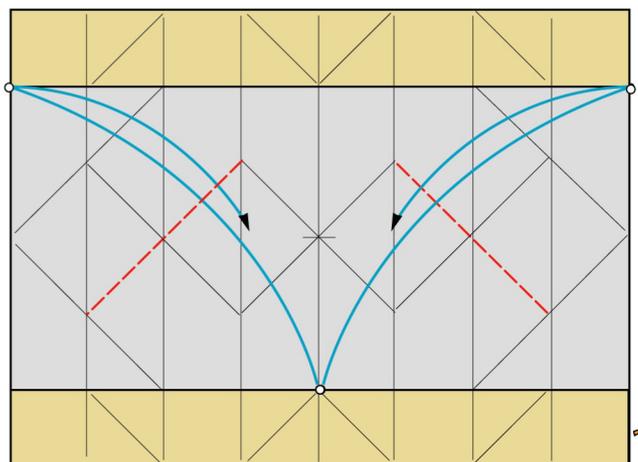
10

9 2 pieghe a valle



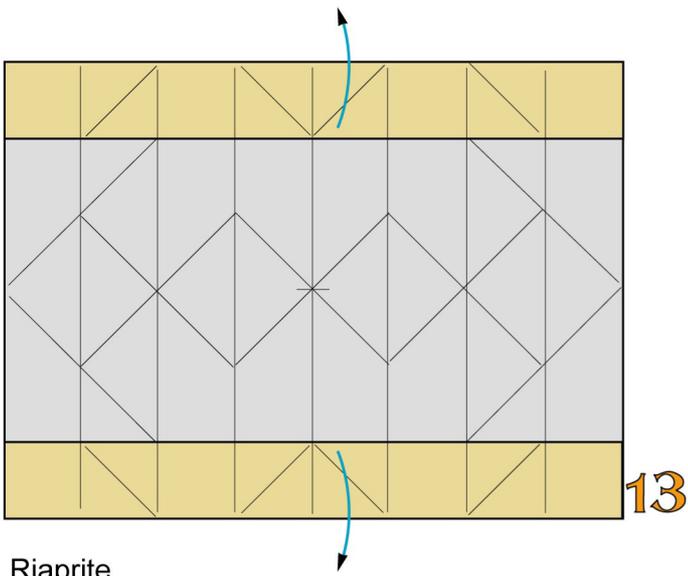
11

2 pieghe a valle



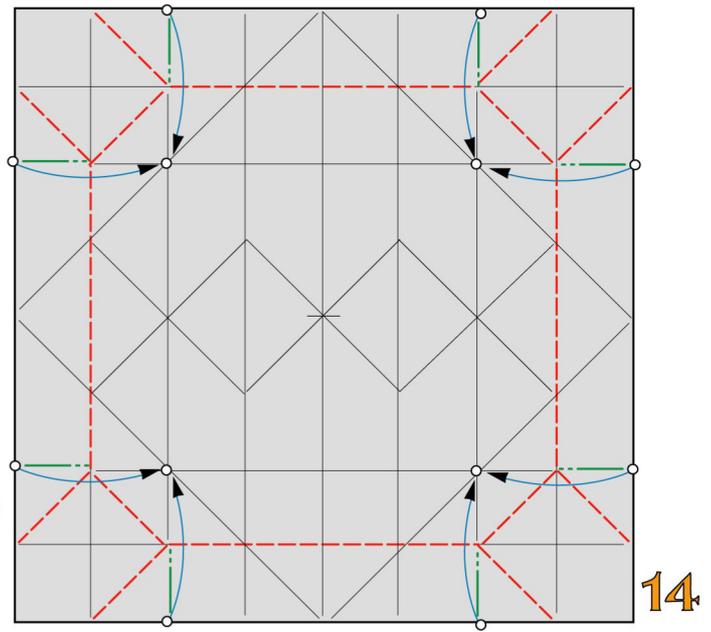
12

2 pieghe a valle



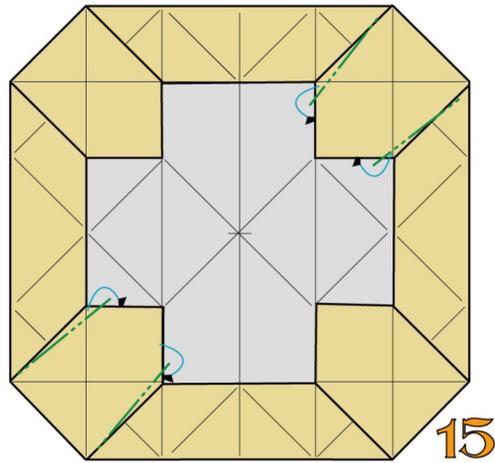
Riaprite

13



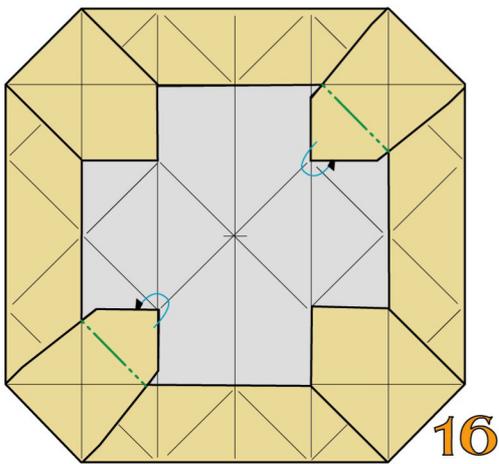
14

Ripiegate a valle e a monte



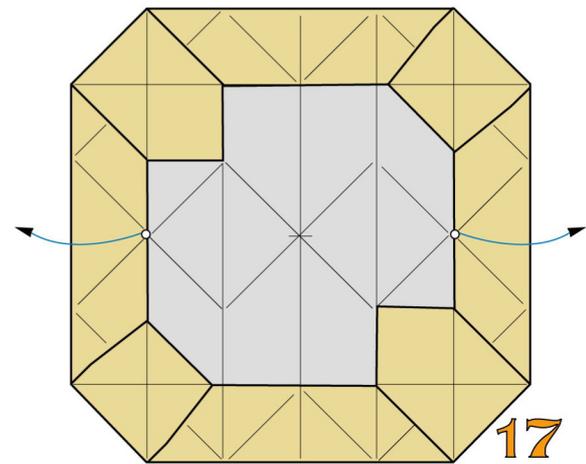
15

4 pieghe a monte



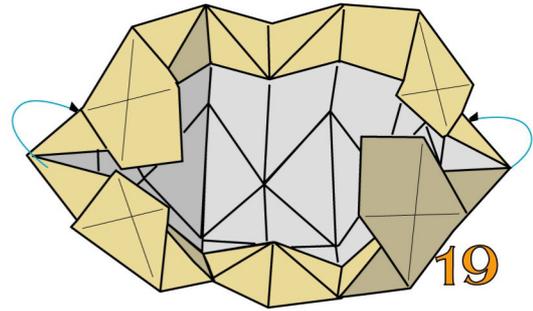
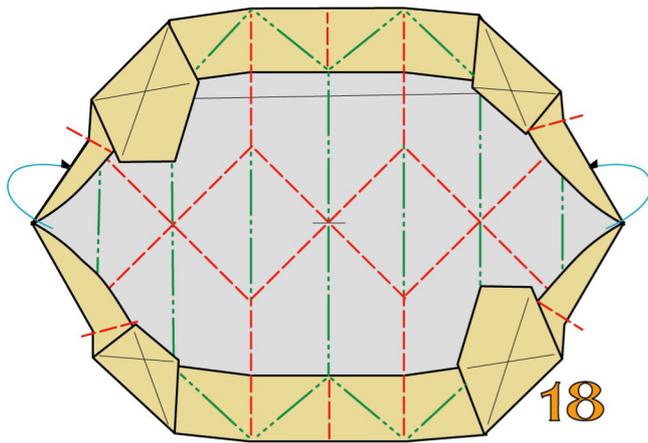
16

2 pieghe a monte

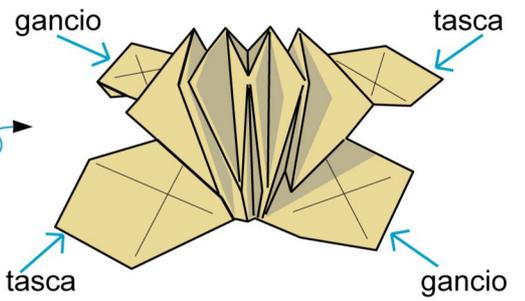
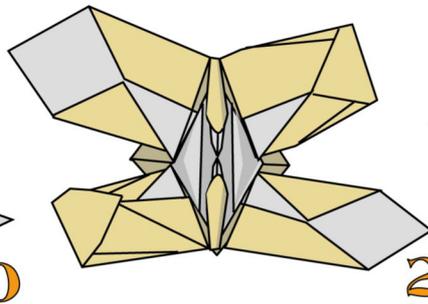
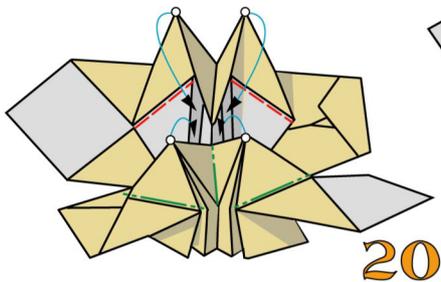


17

Riaprite modellando 3D



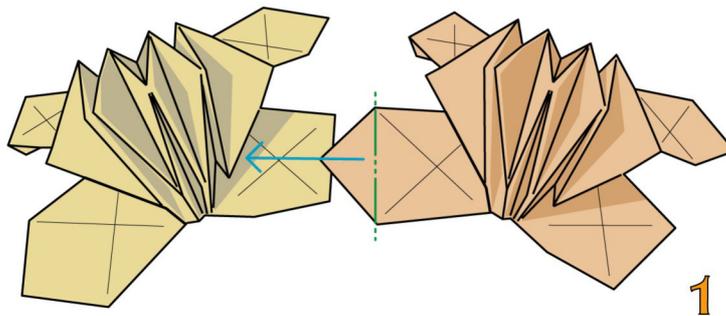
Ripiegate a valle e a monte modellando 3D



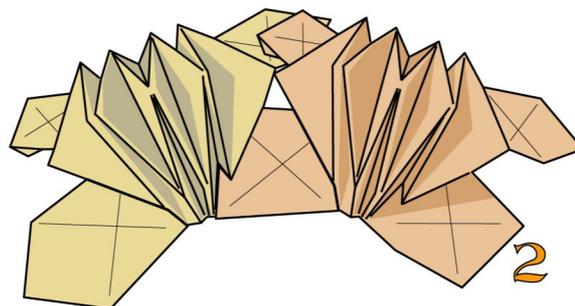
Intascate al centro i 4 vertici

Modulo di "Poligono D" ultimato.  
Ribaltate

UNIONE DEI MODULI



Intascate un modulo nell'altro e bloccate l'unione con una piega a monte



Unione completata

# POLIEDRO 'C'<sup>®</sup> MODULARE TRAFORATO

## **Franco Pavarin 24**

Con questo modulo è possibile costruire molti poliedri.

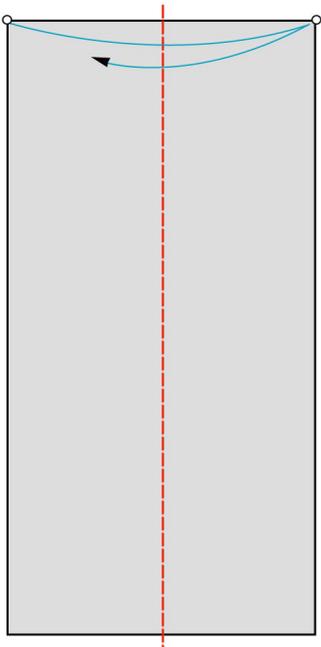
In questo caso si tratta di un cubottaedro.

Adoperate fogli di carta monocolora robusta delle dimensioni di cm 10x5

Construction system that allows the creation of many types of polyhedra;

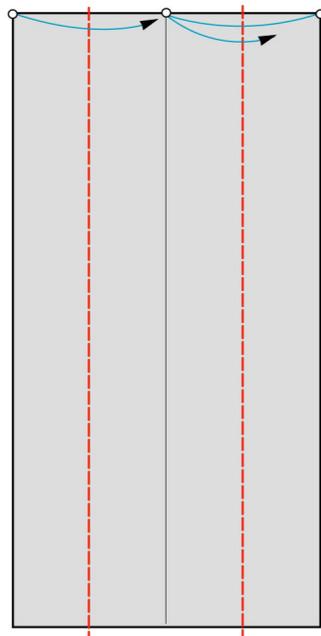
Sistema constructivo que permite la creación de muchos tipos de poliedros;





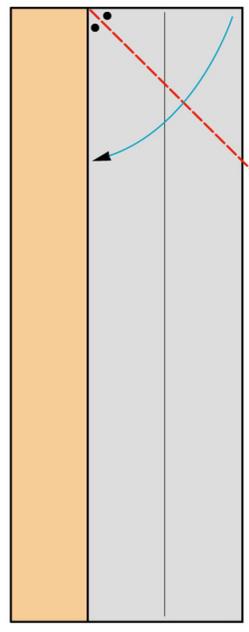
1

1 piega a valle



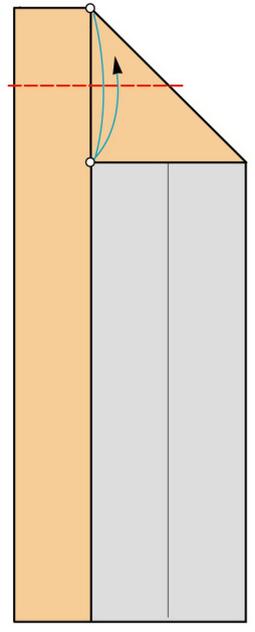
2

2 pieghe a valle



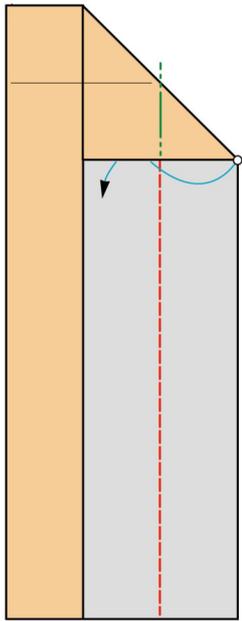
3

1 piega bisettrice a valle



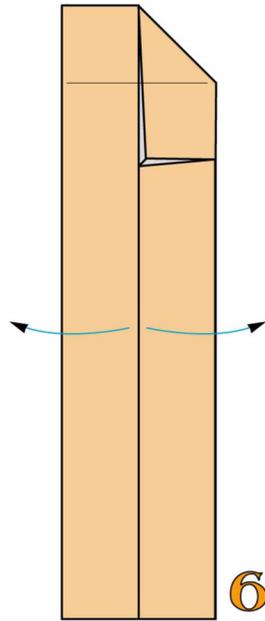
4

1 piega a valle



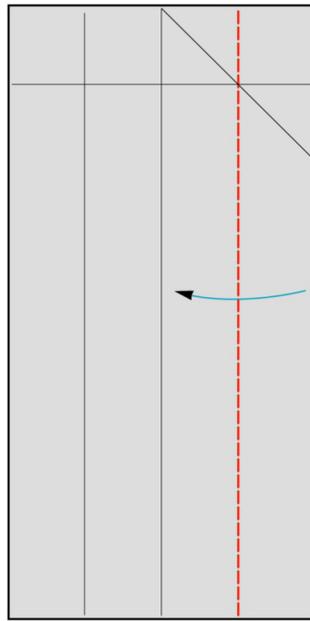
5

1 piega rovescia interna



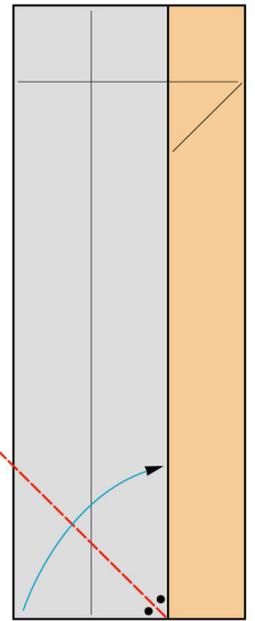
6

Aprite



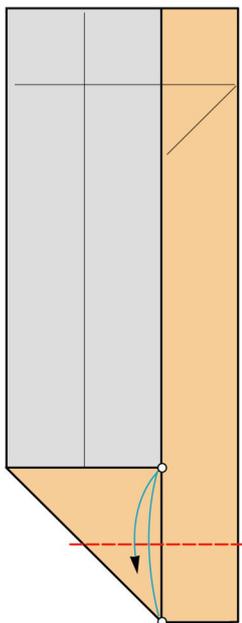
7

Ripiegate a valle



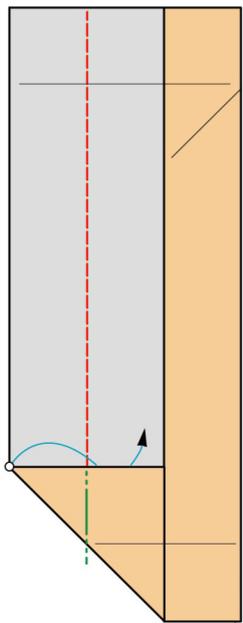
8

1 piega bisettrice a valle



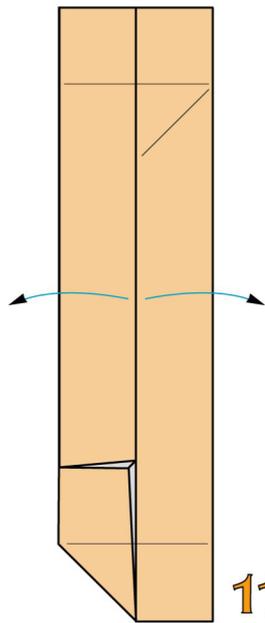
9

1 piega a valle



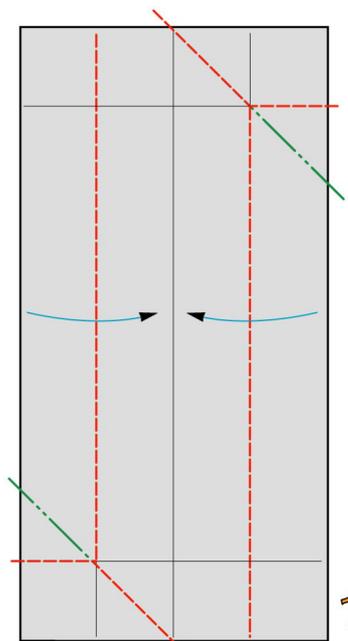
10

1 piega rovescia interna



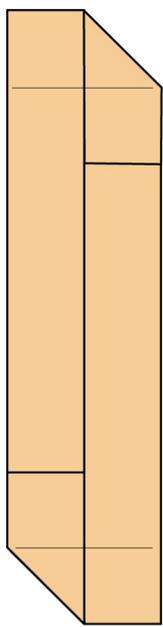
11

Aprite



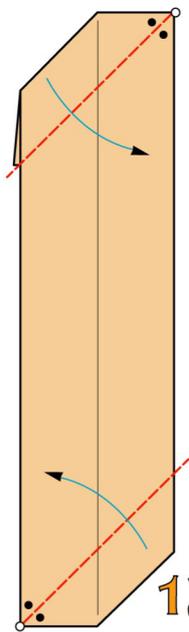
12

Ripiegate a valle e a monte



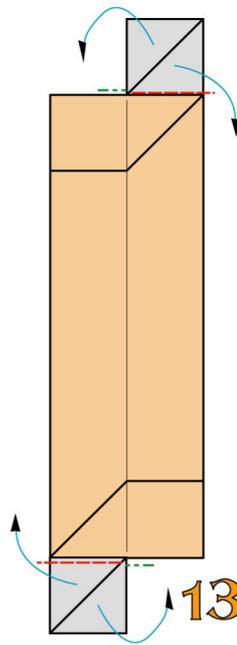
11

Ribaltate



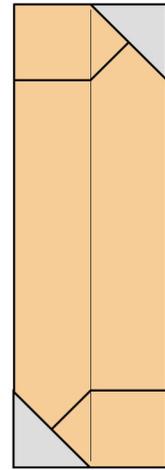
12

2 pieghe bisettrici a valle



13

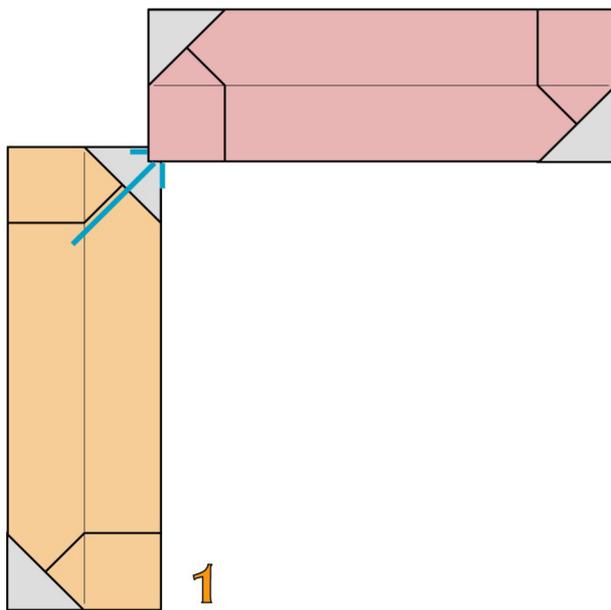
2 pieghe rovesce esterne



14

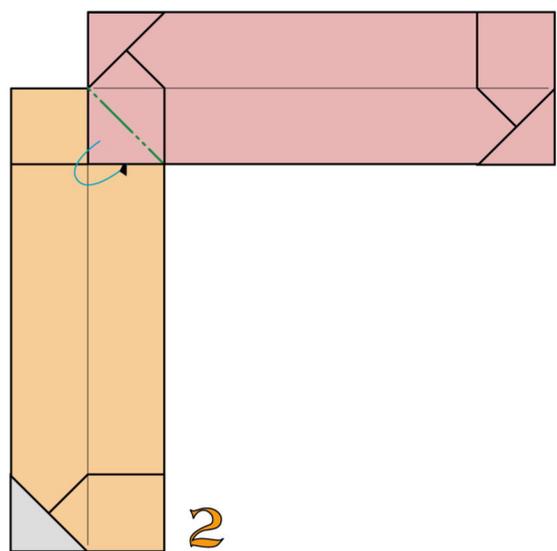
Modulo per poliedri  
"C" ultimato

UNIONE DEI MODULI



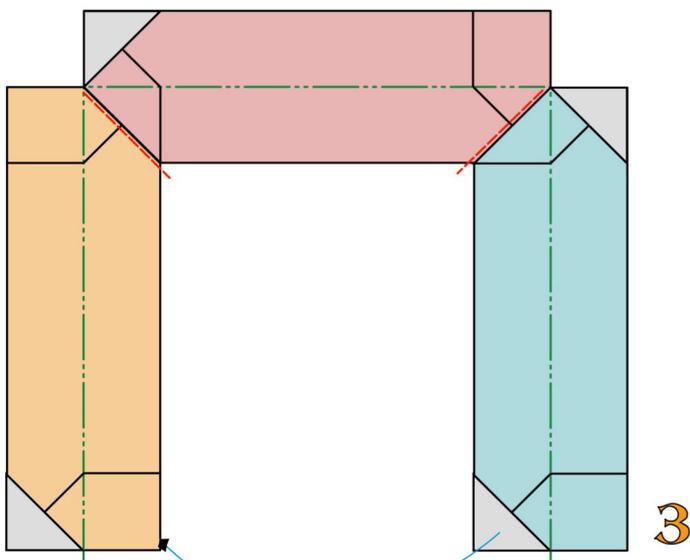
1

Inserite un modulo entro la tasca dell'altro



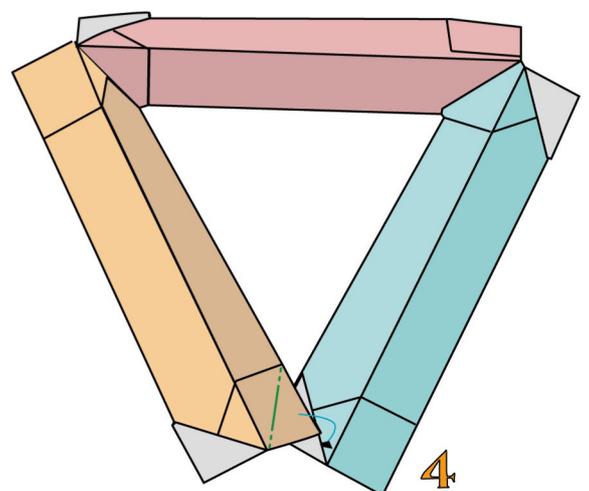
2

Mediante una piega a monte bloccate l'unione



3

Inserite e bloccate un altro modulo.  
Ripiegate a valle e a monte modellando 3D



4

Mediante una piega a monte bloccate l'unione

# POLIEDRO "D" MODULARE TRAFORATO

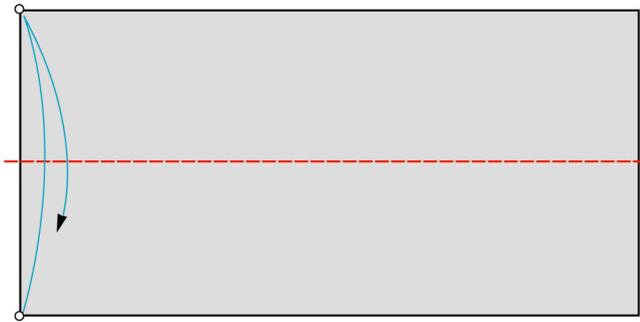
**Franco Pavarin 24**

Con questo modulo è possibile costruire molti poligoni.

In questo caso si tratta di un icosaedro, con 20 facce a triangolo equilatero.

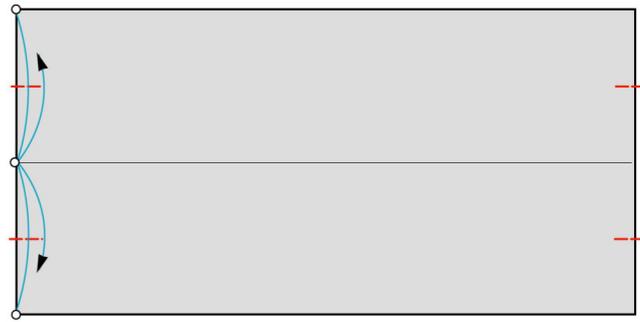
Adoperate 30 fogli di carta monocolori di medio peso delle dimensioni di cm 6x12.





1 piega a valle

1



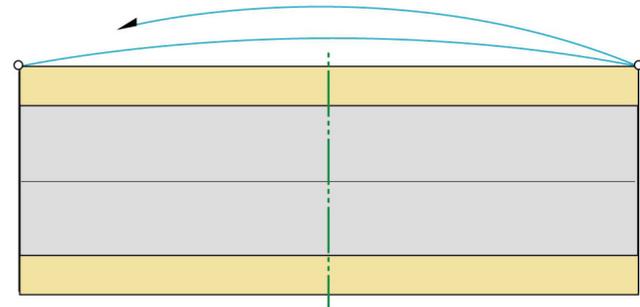
4 piccole pieghe a valle

2



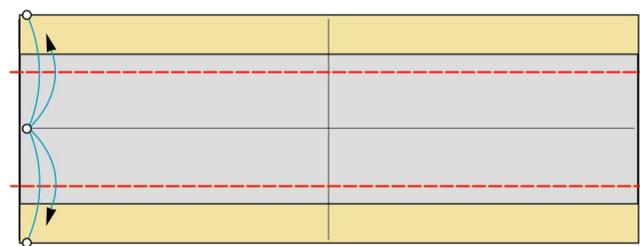
2 pieghe a valle

3



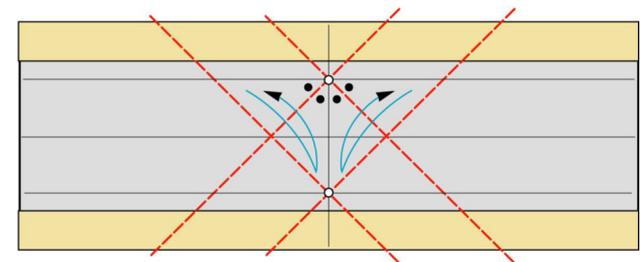
1 piega a monte

4



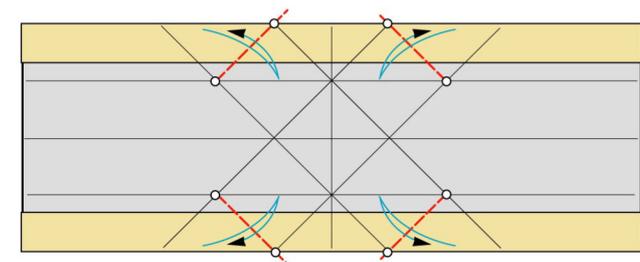
2 pieghe a valle

5



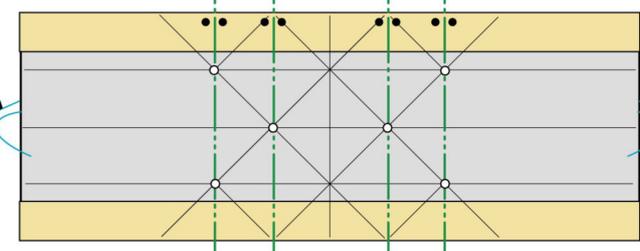
4 pieghe bisettrici a valle

6



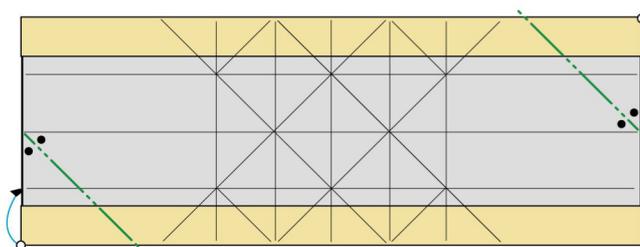
4 pieghe a valle

7



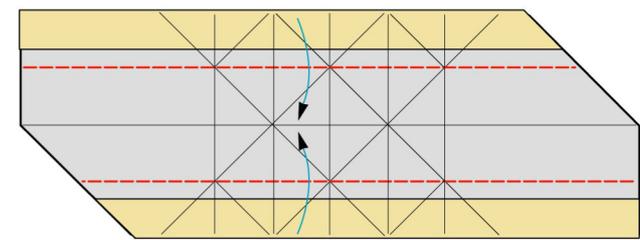
4 pieghe a monte

8



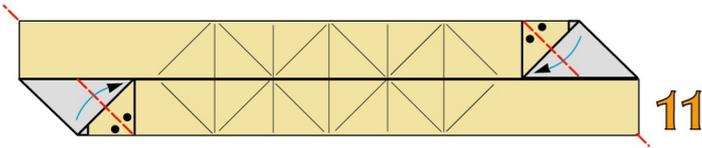
2 pieghe a monte

9

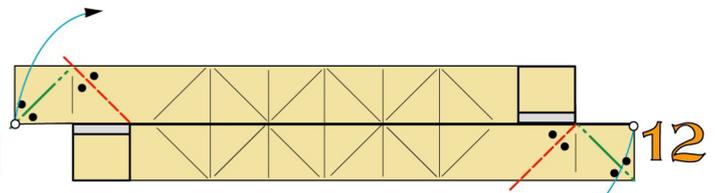


Ripiegate a valle

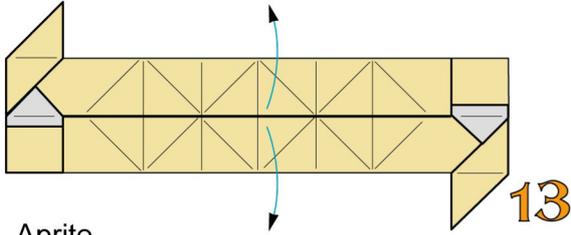
10



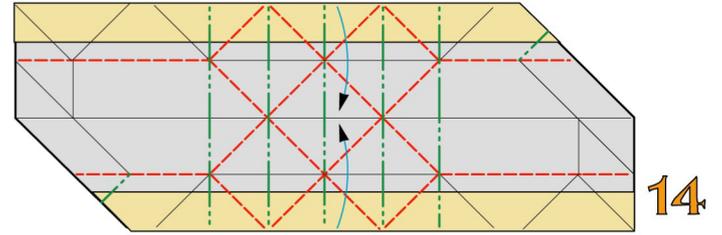
2 pieghe bisettrici a valle



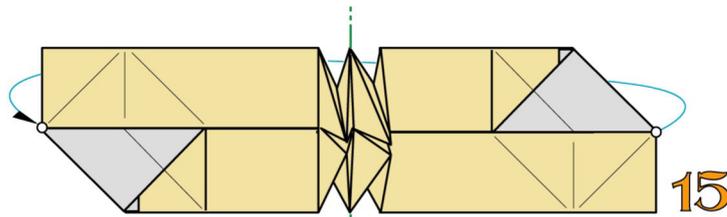
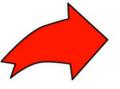
2 pieghe bisettrici a monte e 2 a valle



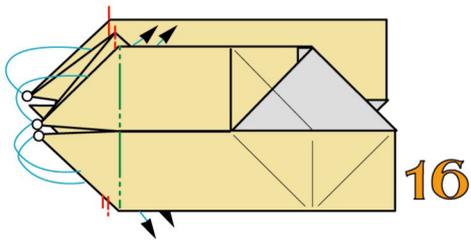
Aprite



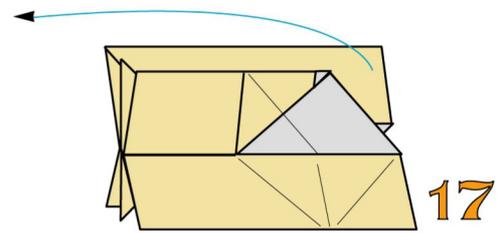
Ripiegate a valle e a monte



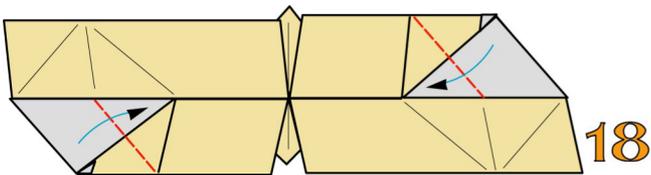
Ripiegate a monte



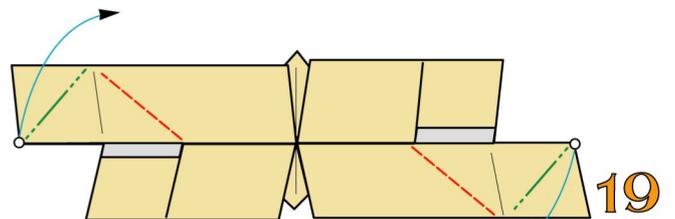
4 pieghe rovesce interne



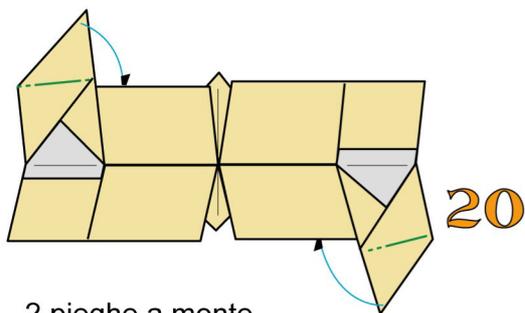
Riaprite



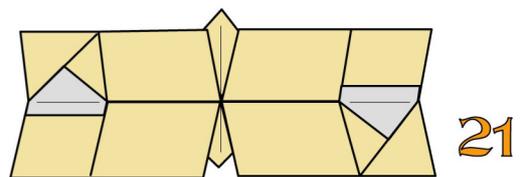
Ripiegate a valle



Ripiegate a valle e a monte

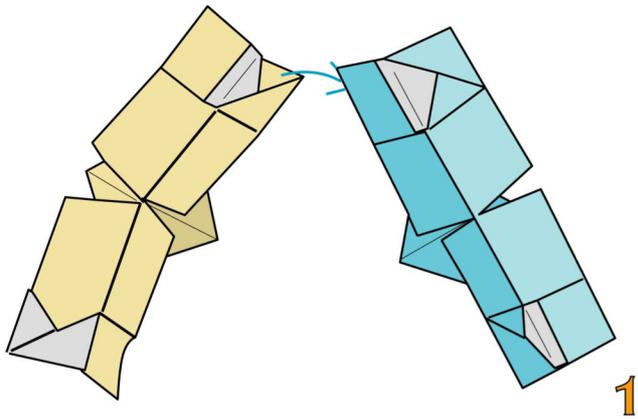


2 pieghe a monte



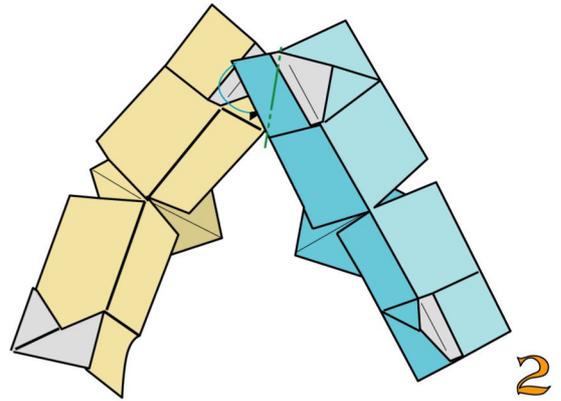
Modulo "N" per poliedri ultimato

## UNIONE DEI MODULI



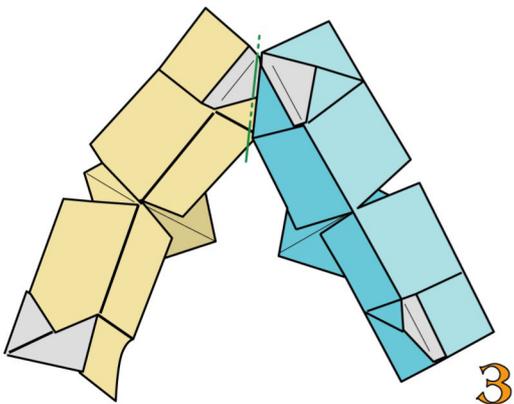
Inserite un modulo nell'altro

1



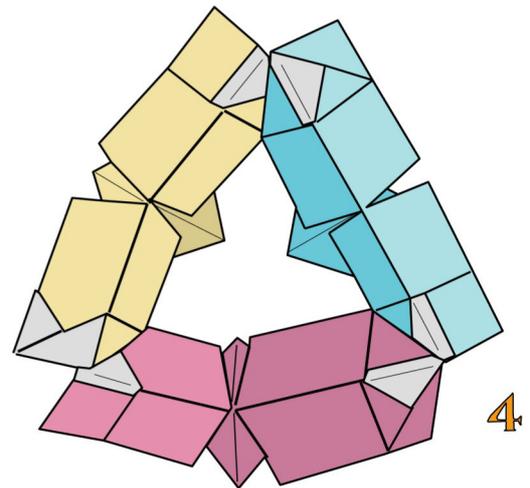
Con una piega a monte intascate e bloccate l'unione

2



Una piega a monte.  
Moduli uniti.  
Aggiungete altri moduli

3



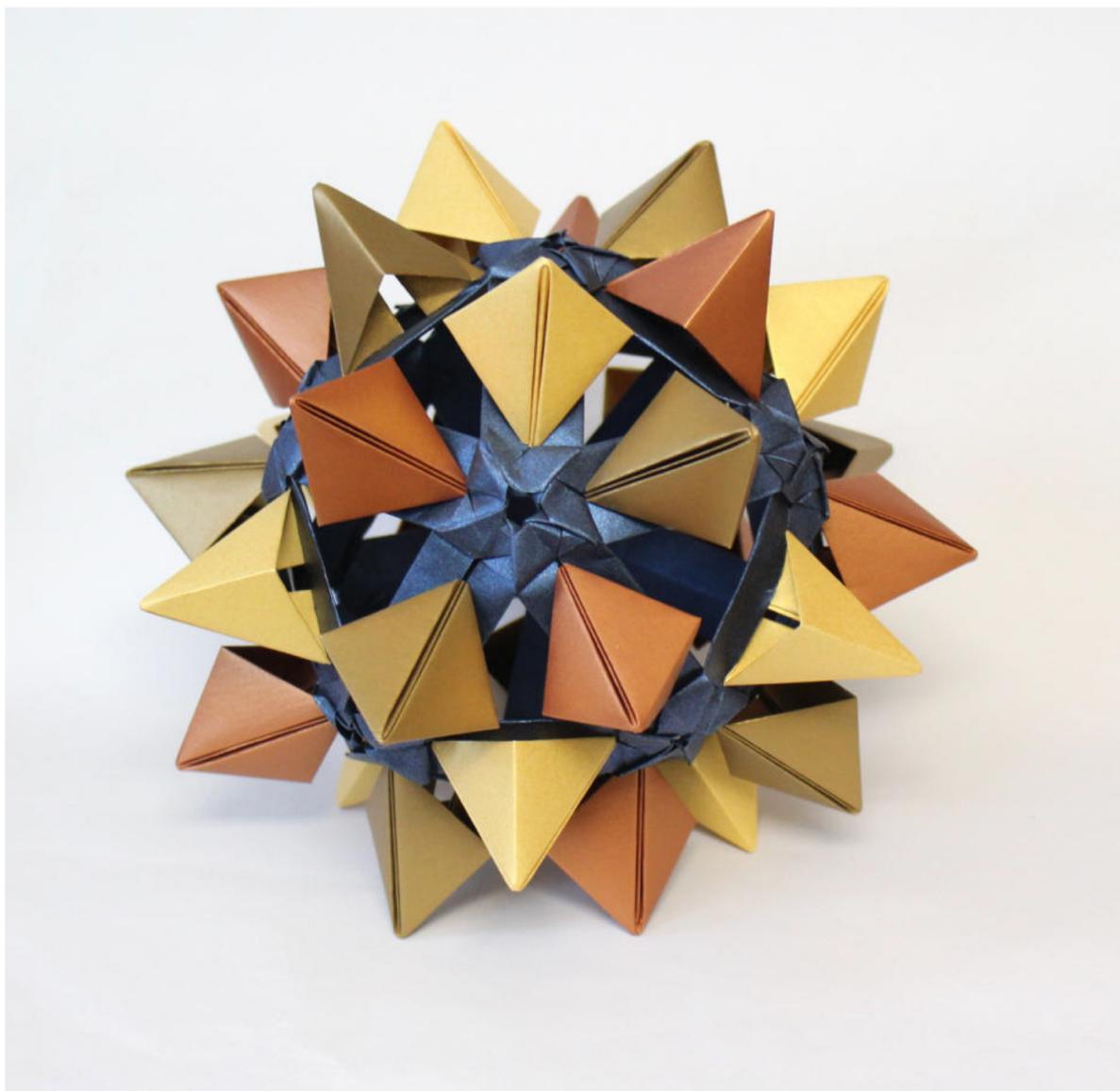
3 moduli uniti

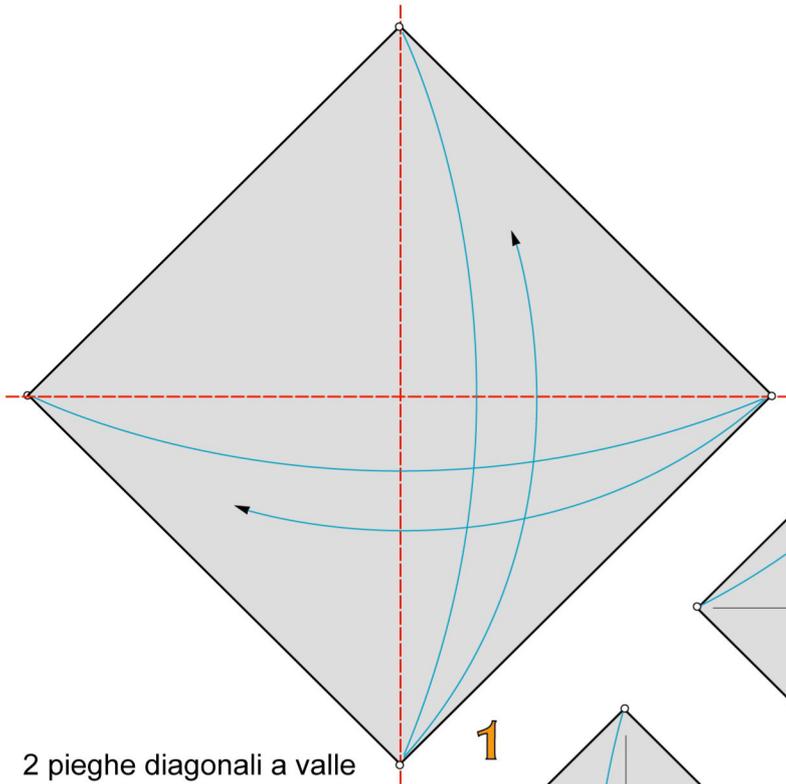
4

# POLIEDRO "E" MODULARE TRAFORATO

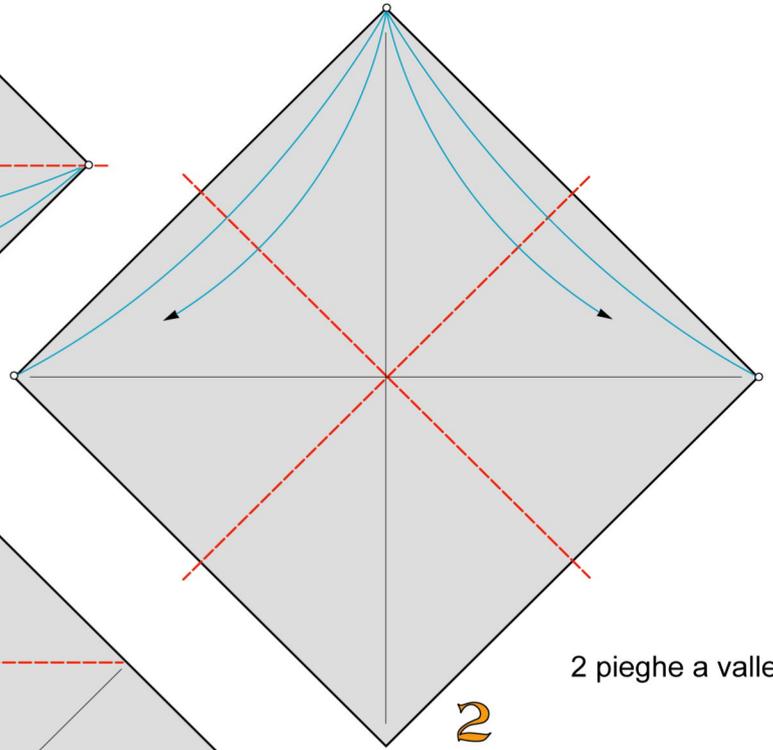
**Franco Pavarin 24**

Questo poliedro con struttura interna ad icosaedro è formato da 30 moduli composti da 1 modulo di supporto e 1 modulo per poliedri "E" strettamente legati. Adoperate fogli monocolori robusti di dimensione 10x10 cm.

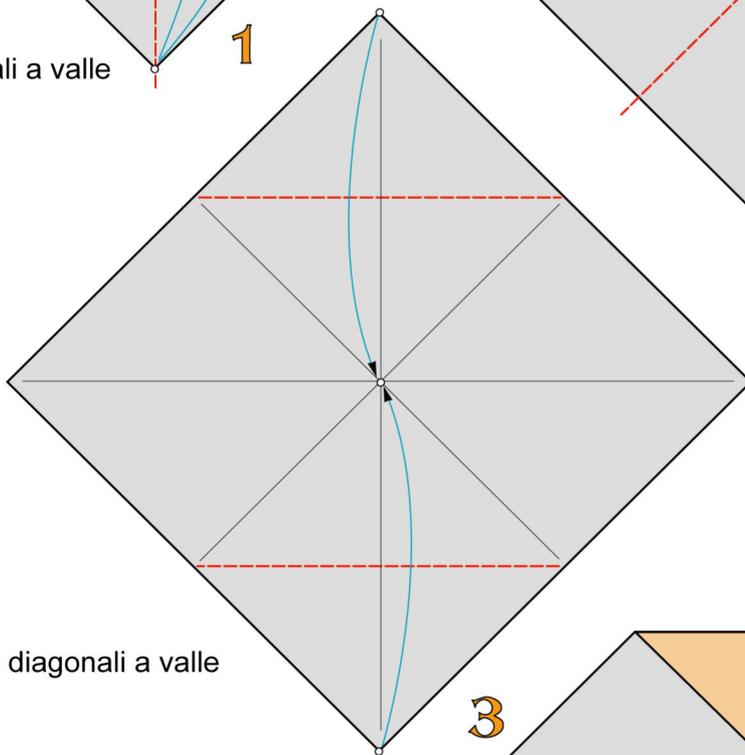




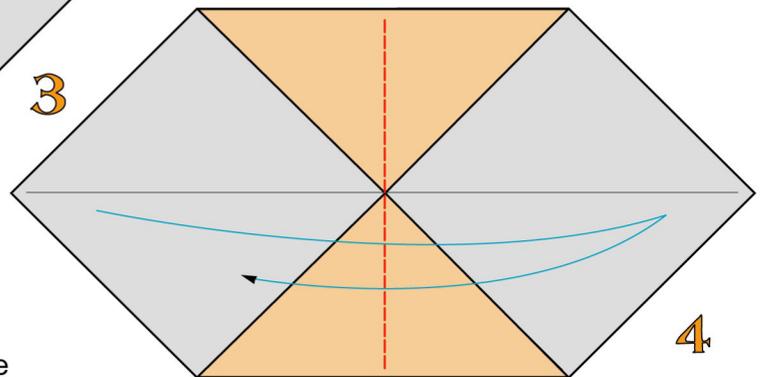
2 pieghe diagonali a valle



2 pieghe a valle

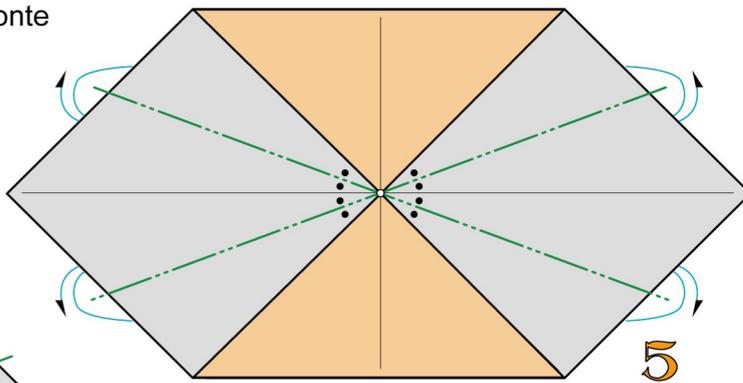


2 pieghe diagonali a valle

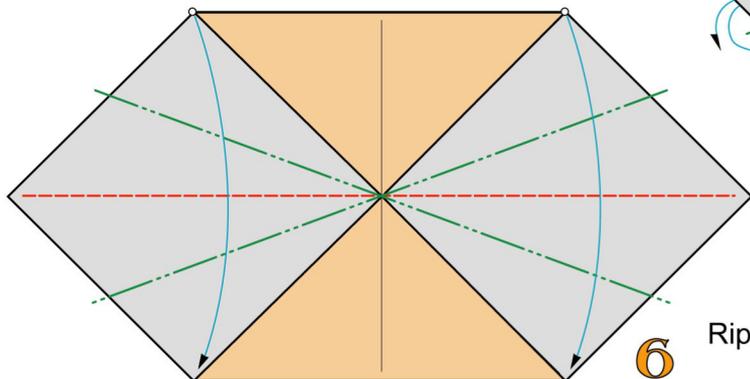


Ripiegate a valle

2 pieghe bisettrici a monte

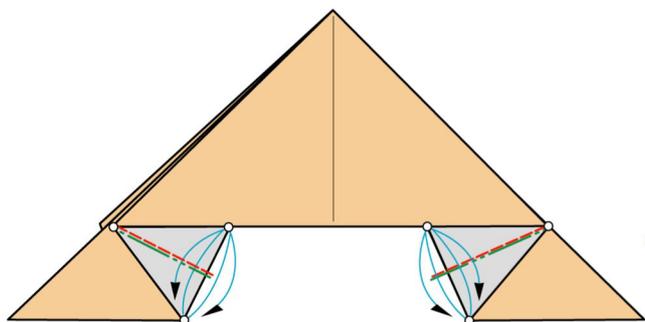


5



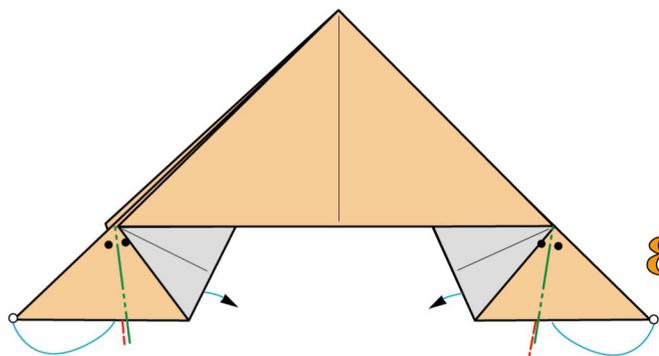
6

Ripiegate a valle e a monte



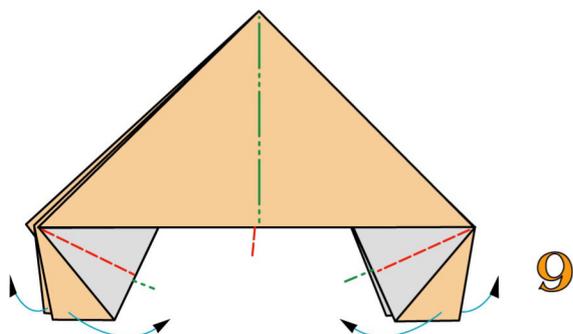
7

2 pieghe a valle e 2 a monte coincidenti



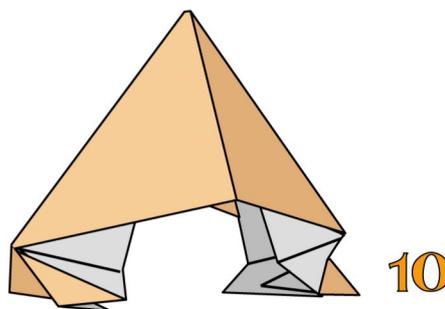
8

2 pieghe rovesce interne



9

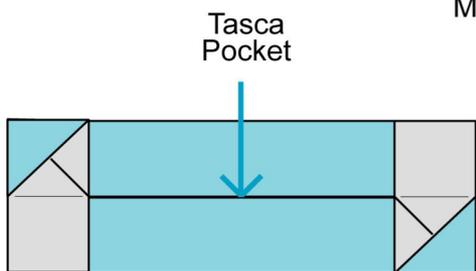
Ripiegando aprite



10

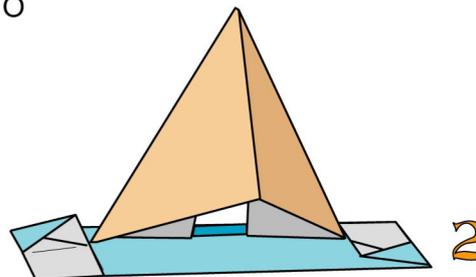
Modulo per poliedri "E" ultimato

MODULO COMPOSTO



1

Inserite il modulo "E" nella tasca del poliedro di supporto



2

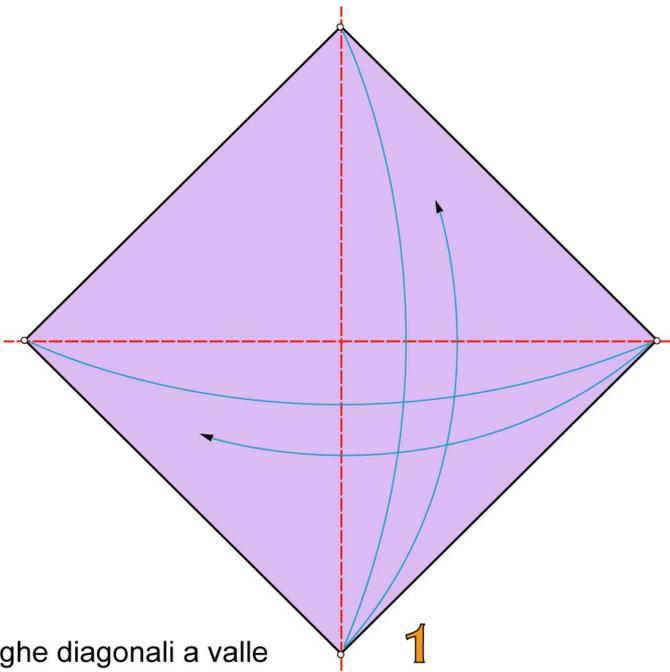
Modulo composto per Poliedro "E" ultimato

# POLIEDRO "F" TRAFORATO

**Franco Pavarin 24**

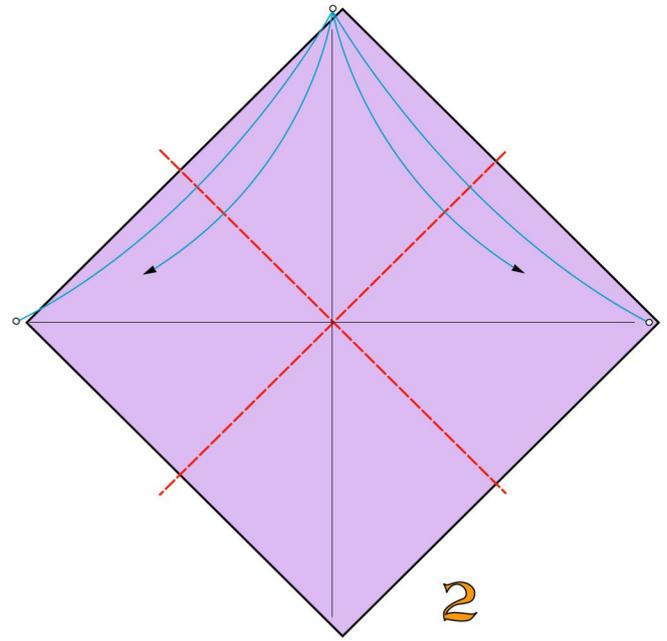
Questo poliedro con struttura interna ad icosaedro è formato da 30 moduli composti da 1 modulo di supporto e 1 modulo per poliedri "F" strettamente legati. Adoperate fogli monocolori robusti di dimensione cm 10x5 per i moduli di supporto e cm 10x10 per i moduli F





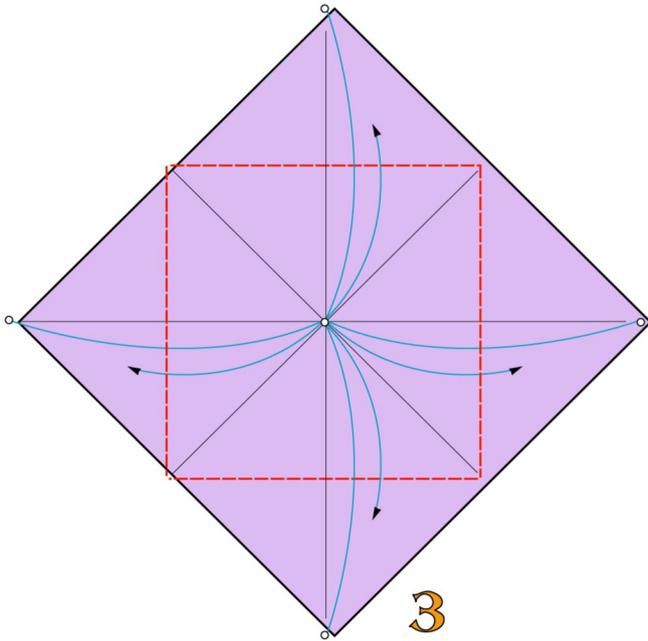
2 pieghe diagonali a valle

1



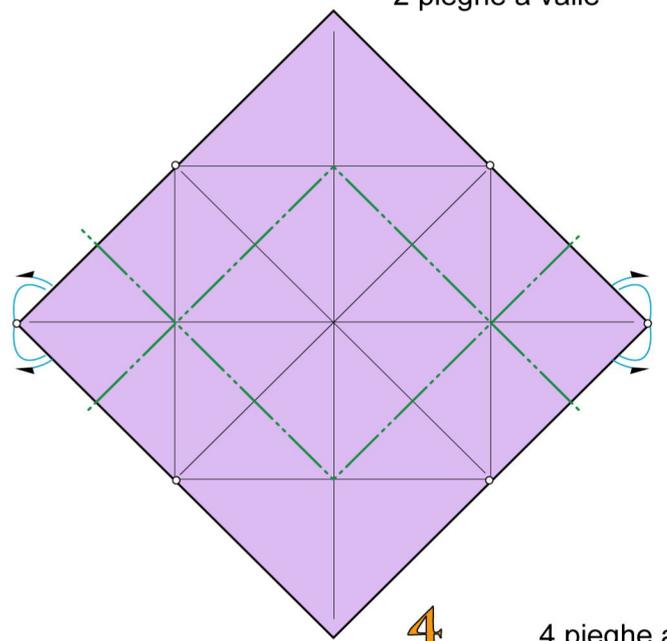
2

2 pieghe a valle



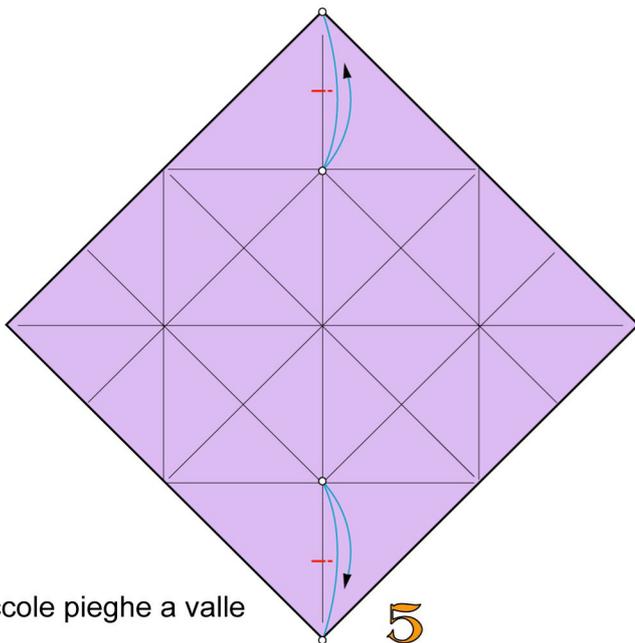
3

4 pieghe diagonali a valle



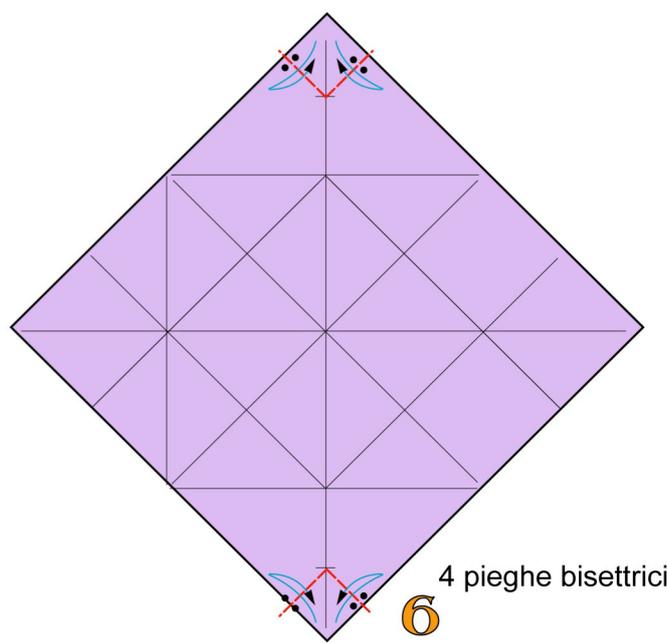
4

4 pieghe a monte



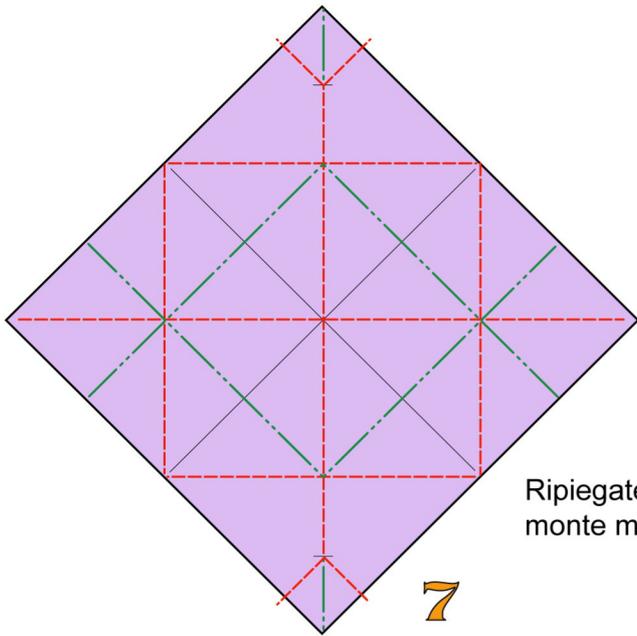
5

2 piccole pieghe a valle

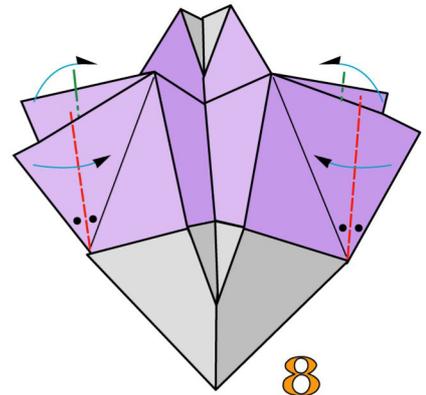


6

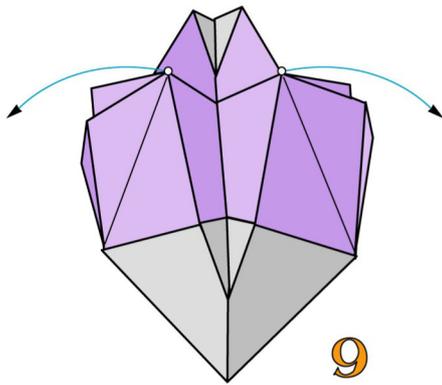
4 pieghe bisettrici a valle



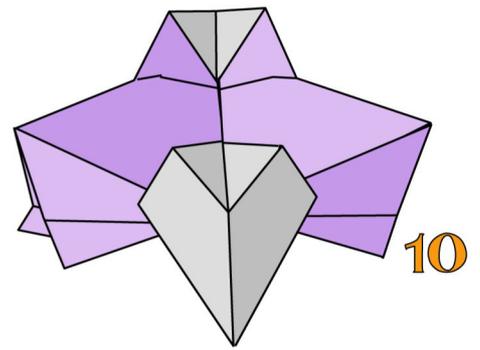
Ripiegate a valle e a monte modellando 3D



4 pieghe a valle, 2 per lato

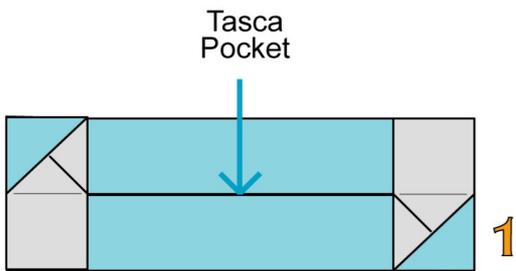


Aprite

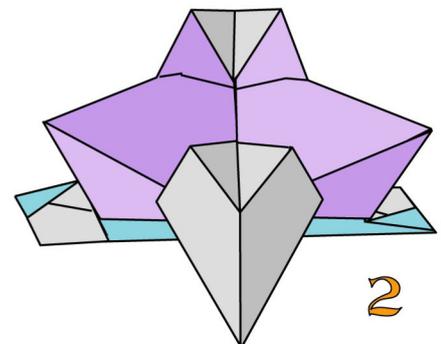


Modulo per poliedri "F" ultimato

MODULO COMPOSTO



Inserite il modulo "F" nella tasca del poliedro di supporto



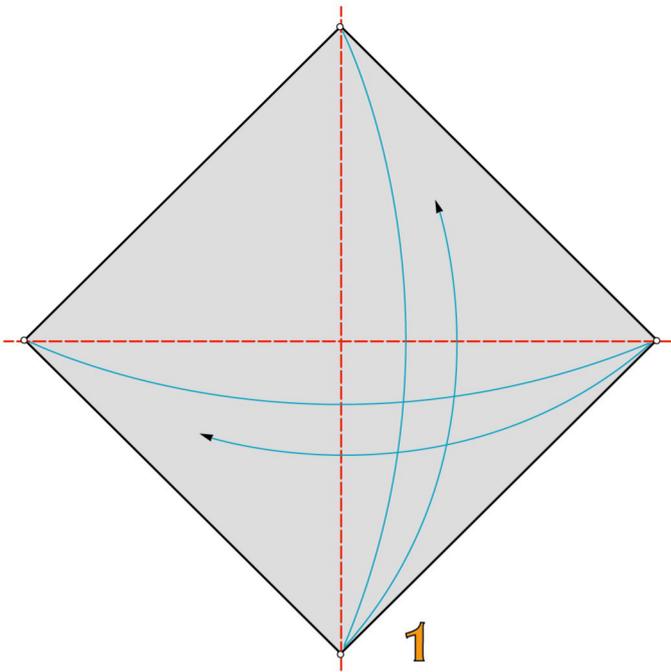
Modulo composto per Poliedro "F" ultimato

# POLIEDRO "G"

**Franco Pavarin 24**

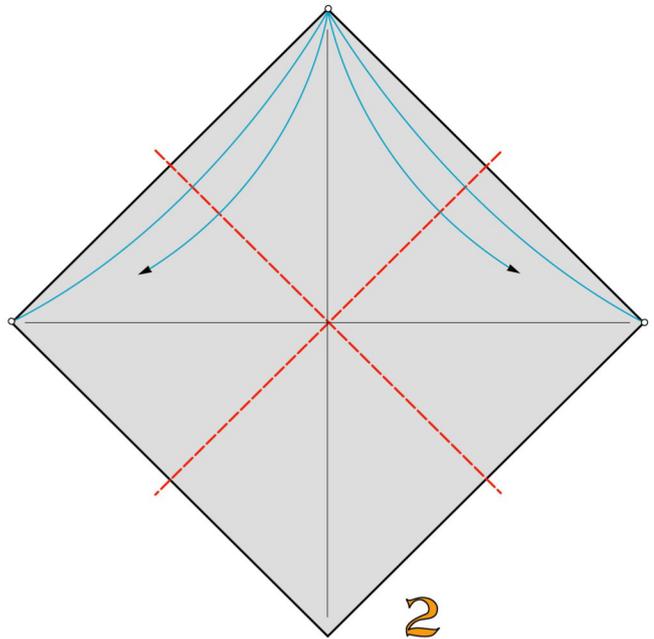
Questo poliedro con struttura interna ad icosaedro è formato da 30 moduli composti da 1 modulo di supporto e 1 modulo per poliedri "G" strettamente legati. Adoperate fogli monocolori robusti di dimensione cm 10x5 per i moduli di supporto e cm 10x10 per i moduli G





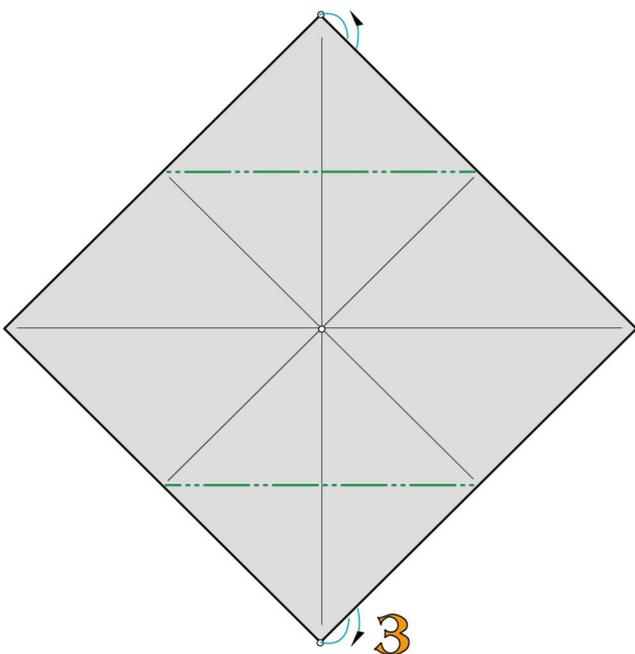
1

2 pieghe diagonali a valle



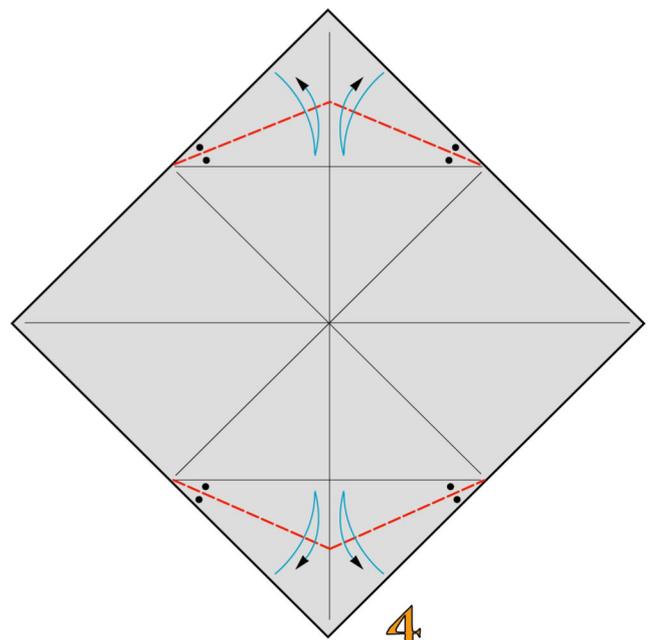
2

2 pieghe a valle



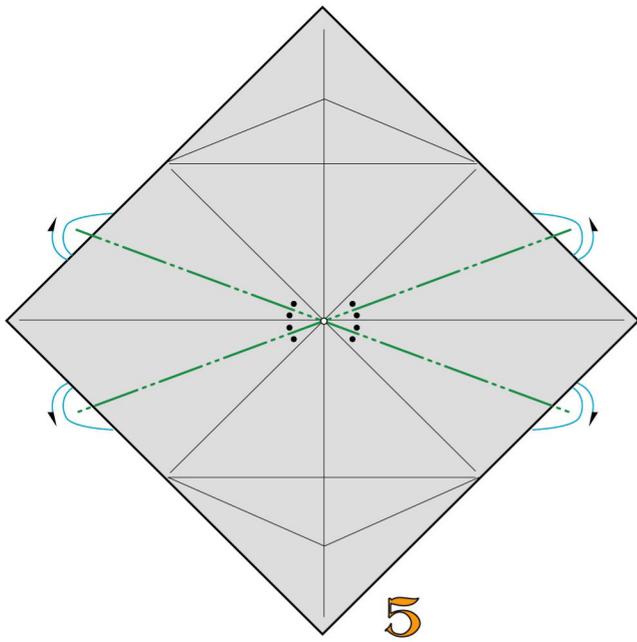
3

2 pieghe diagonali a monte

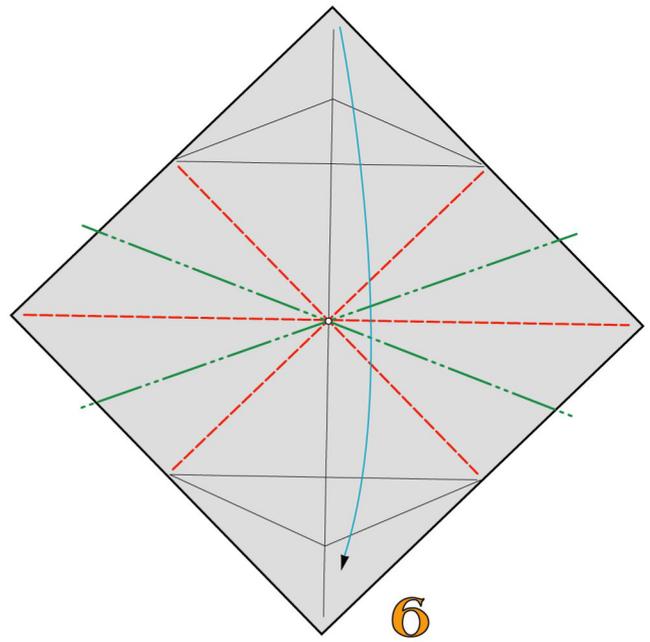


4

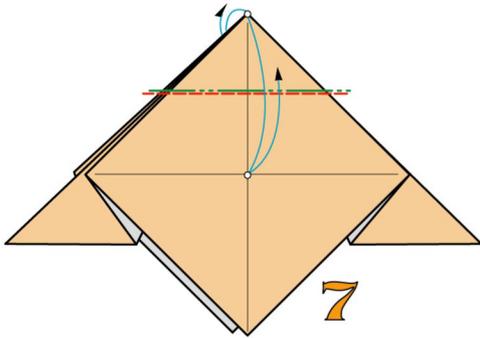
4 pieghe bisettrici a valle



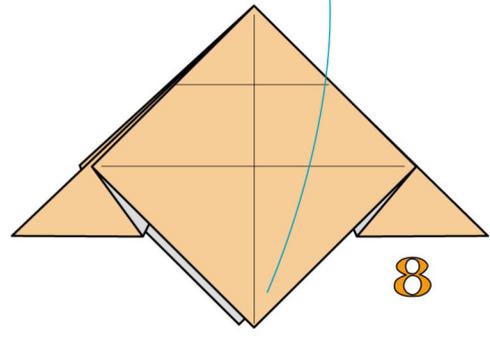
5  
2 pieghe bisettrici a monte



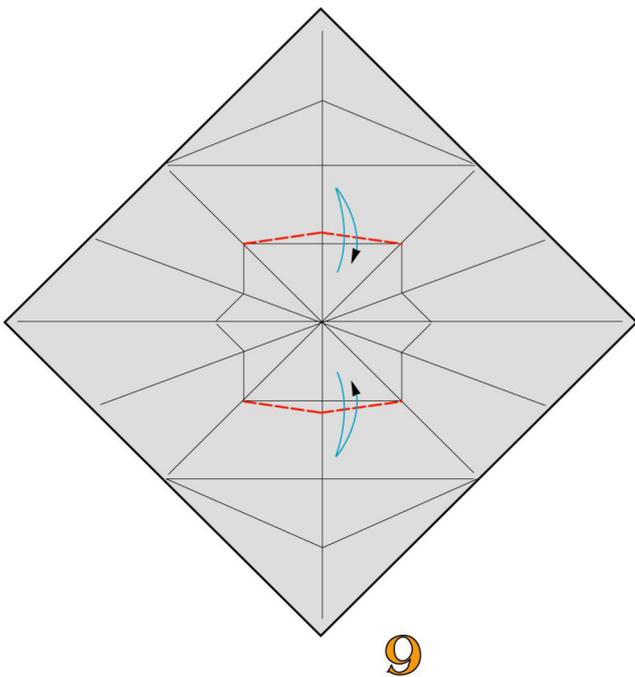
6  
Ripiegate a valle e a monte



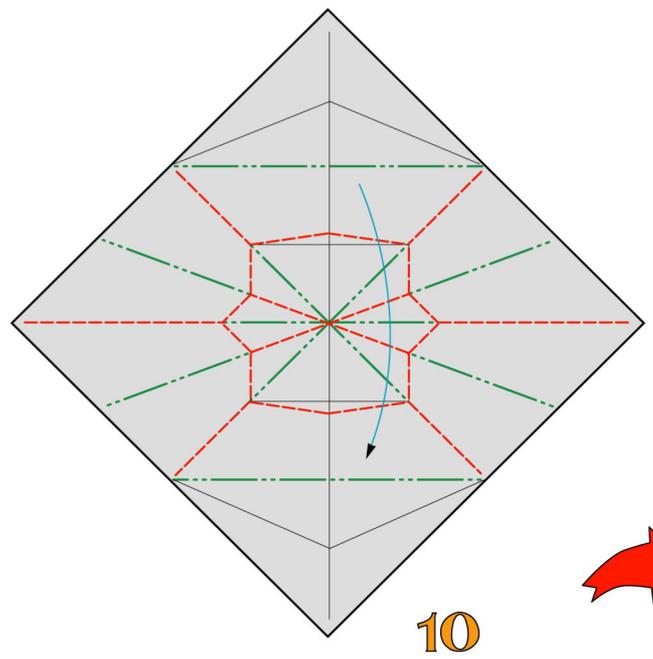
7  
1 piega a valle e 1 a monte coincidenti



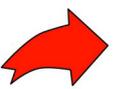
8  
Riaprite

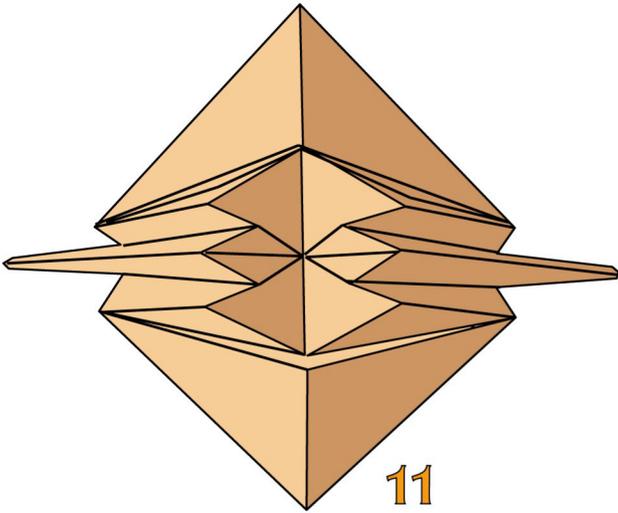


9  
2 pieghe a valle



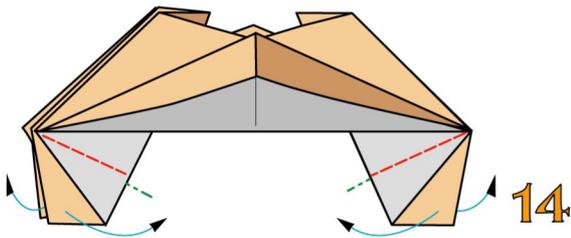
10  
Ripiegate a valle e a monte modellando 3D





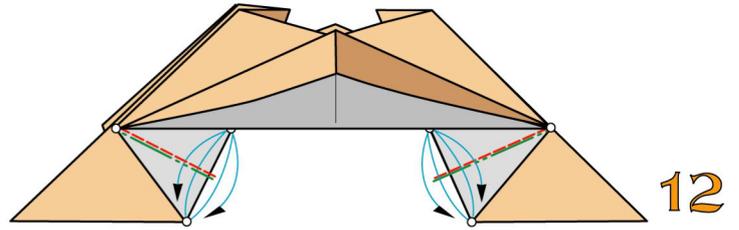
11

Vista in pianta



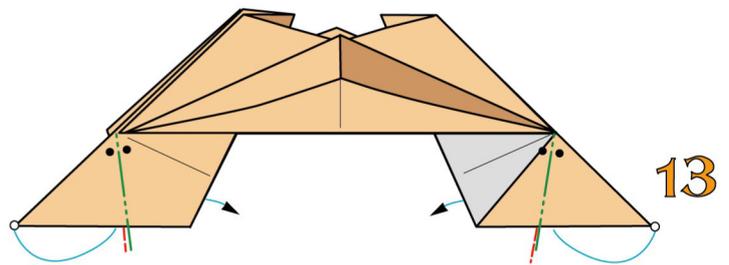
Ripiegando aprite

14



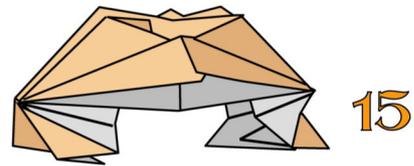
12

Vista laterale. 2 pieghe a valle e 2 a monte coincidenti



13

2 pieghe rovesce interne

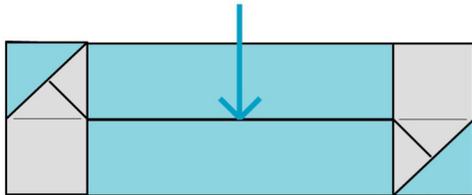


15

Modulo per poliedri "G" ultimato

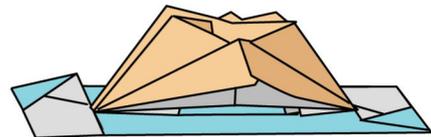
MODULO COMPOSTO

Tasca Pocket



1

Inserite il modulo "E" nella tasca del poliedro di supporto



2

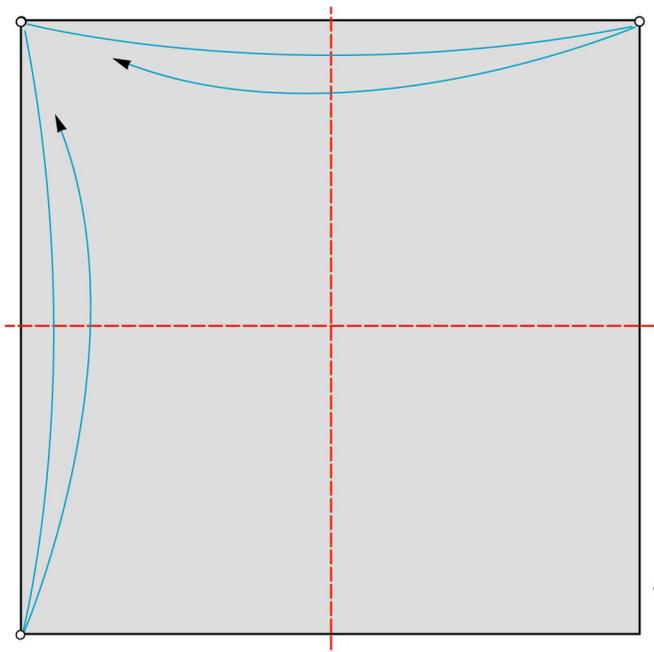
Modulo composto per Poliedro "G" ultimato

# POLIEDRO TRAFORATO "H"

**Franco Pavarin 24**

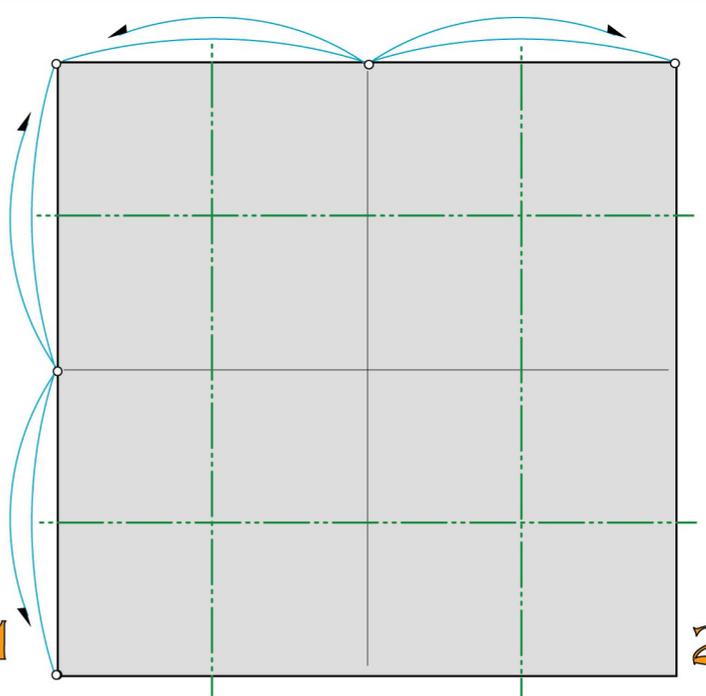
Questo poliedro con struttura interna ad icosaedro è formato da 30 moduli composti da 1 modulo di supporto e 1 modulo per poliedri "H" strettamente legati. Adoperate fogli monocolori robusti di dimensione cm 10x5 per i moduli di supporto e cm 10x10 leggeri per i moduli H





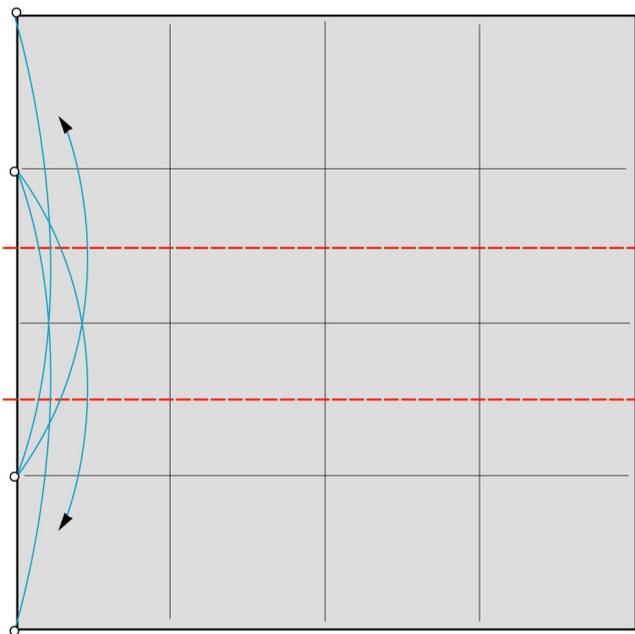
2 pieghe a valle

1



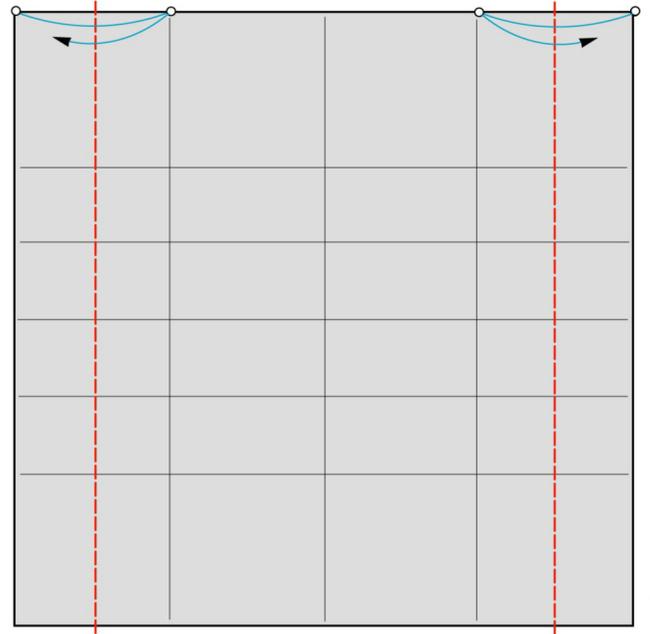
4 pieghe a monte

2



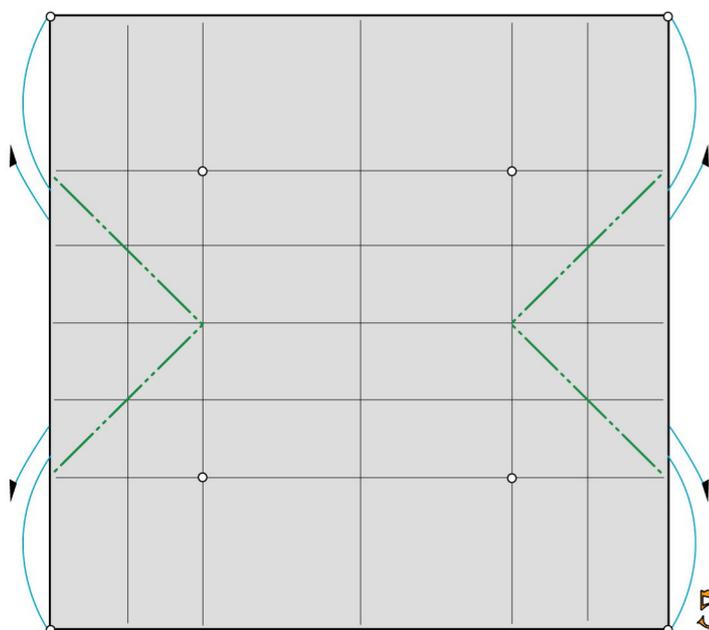
2 pieghe a valle

3



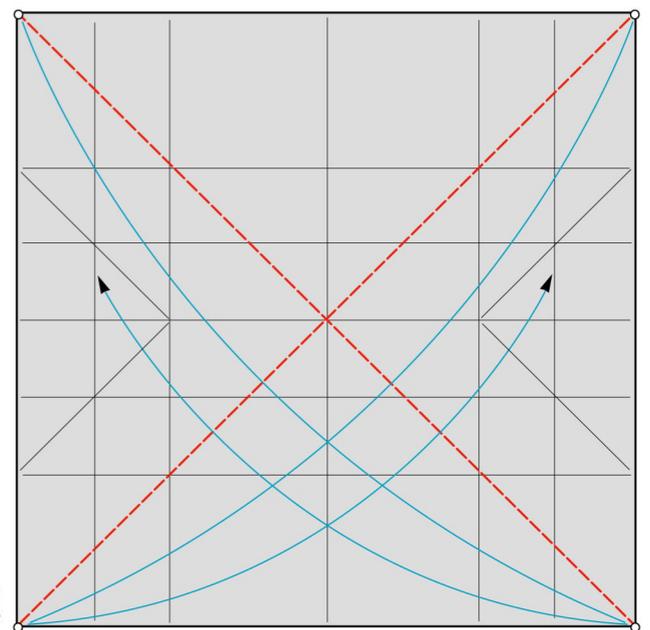
2 pieghe a valle

4



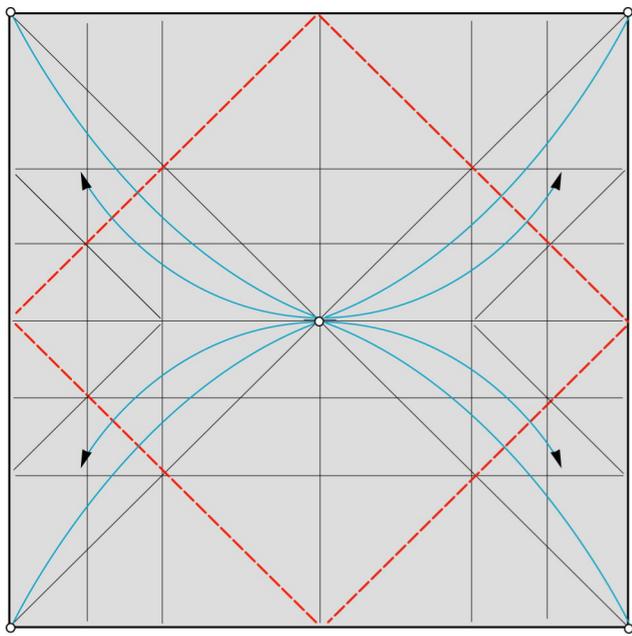
4 pieghe a monte

5

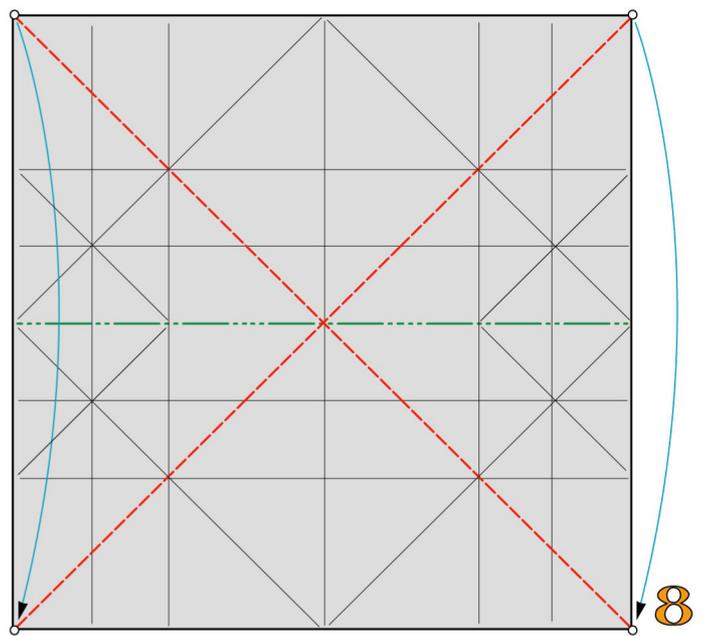


2 pieghe diagonali a valle

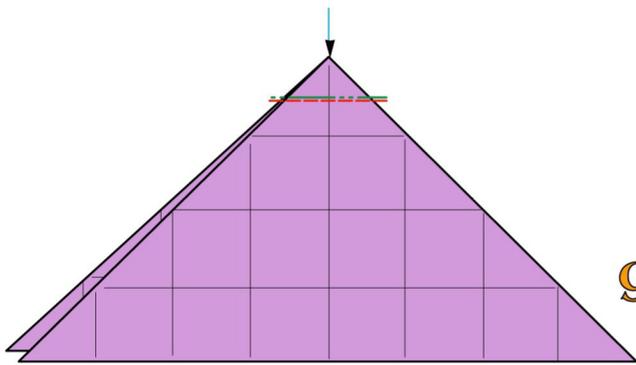
6



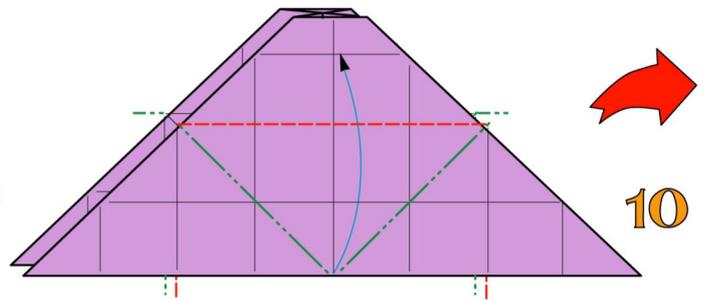
4 pieghe diagonali a valle



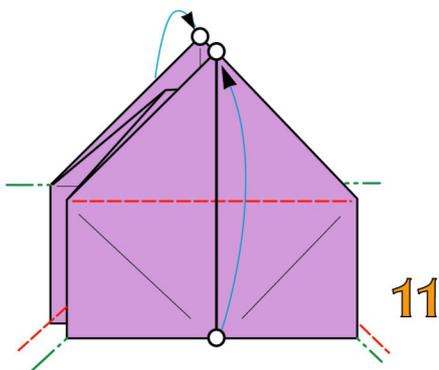
Ripiegate a valle a monte



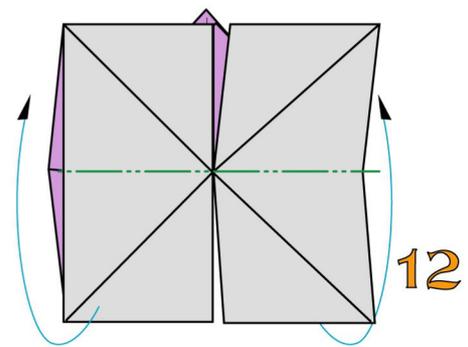
Fate rientrare il vertice superiore



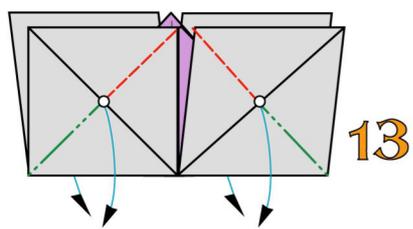
Ripiegate a valle e a monte



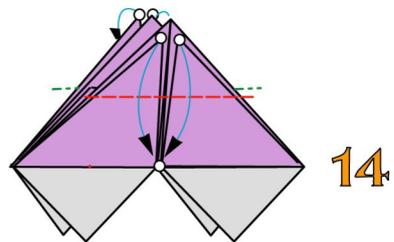
Ripiegate a valle e a monte



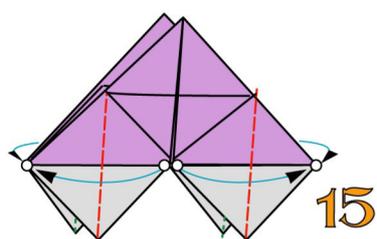
Ripiegate a monte



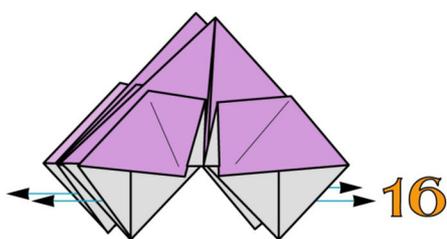
Ripiegate a valle e a monte



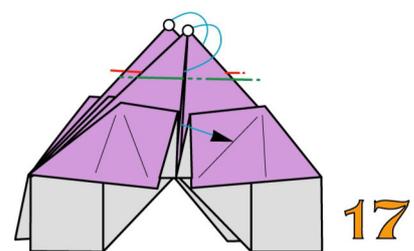
4 pieghe a valle, 2 per lato



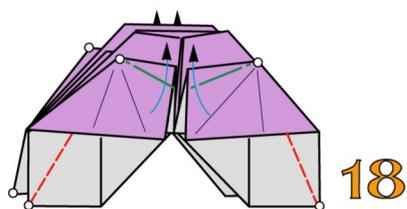
4 pieghe a valle, 2 per lato



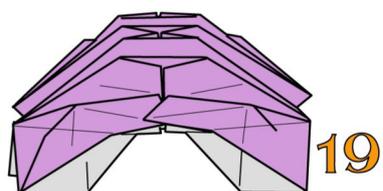
Estraete le 4 superfici interne



2 pieghe rovesce interne



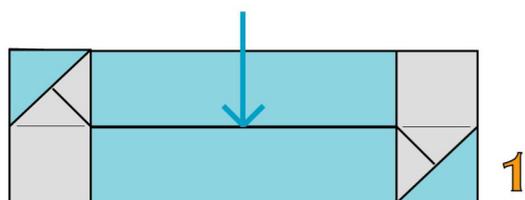
4 pieghe a valle e 4 pieghe a monte, 2 per lato



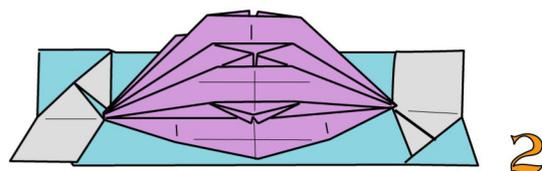
Modulo per poliedri "H" ultimato

MODULO COMPOSTO

Tasca Pocket



Inserite il modulo "E" nella tasca del poliedro di supporto

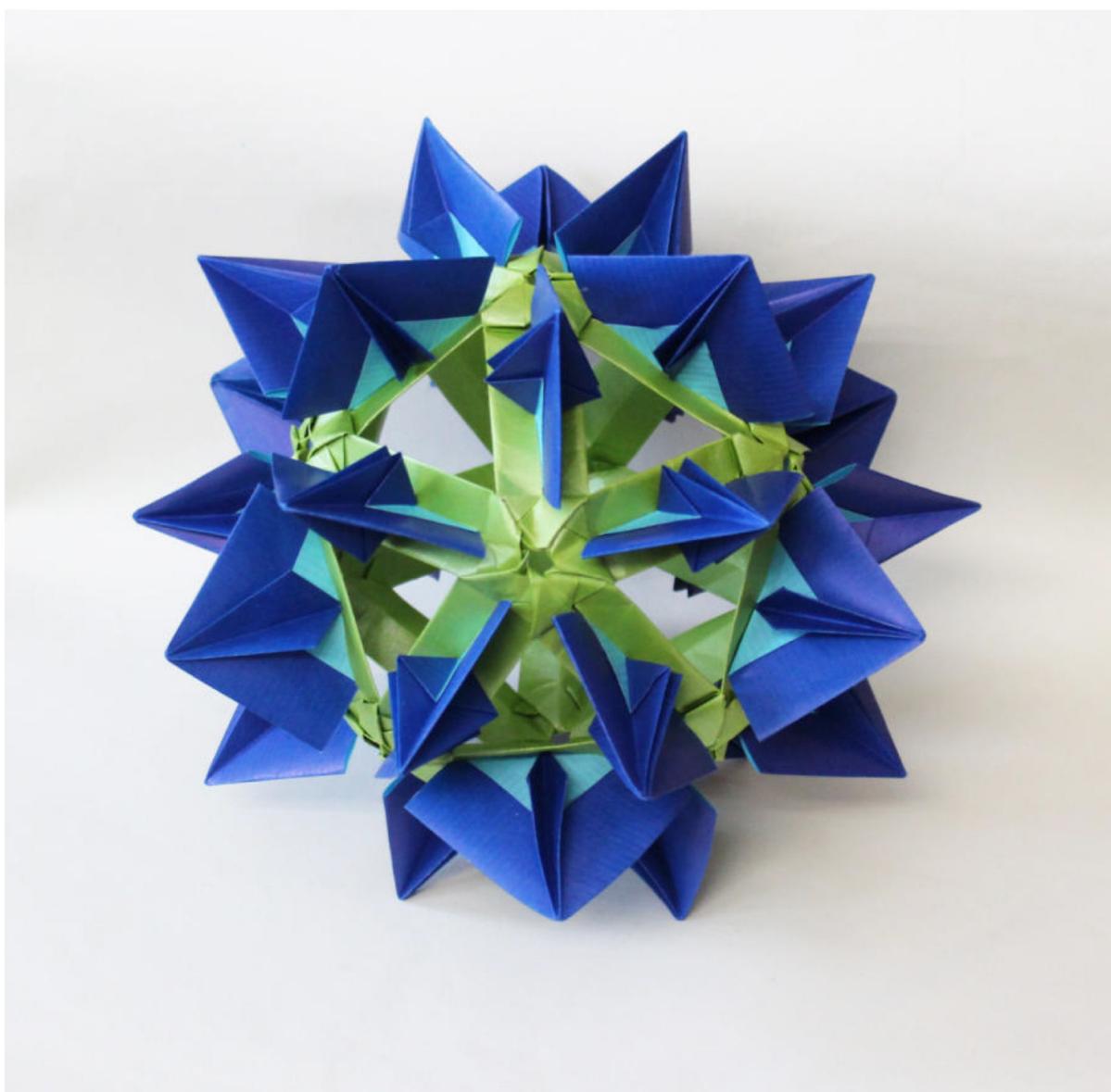


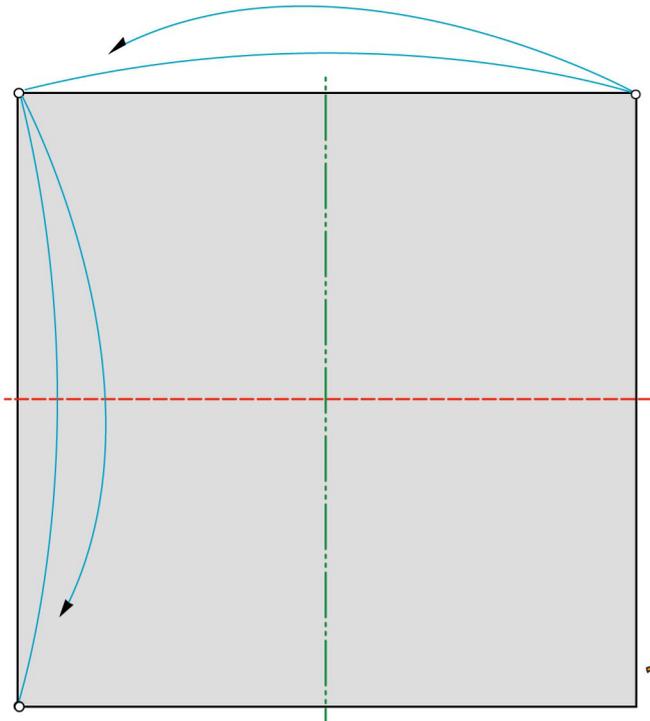
Modulo composto per Poliedro "E" ultimato

# POLIEDRO TRAFORATO "I"

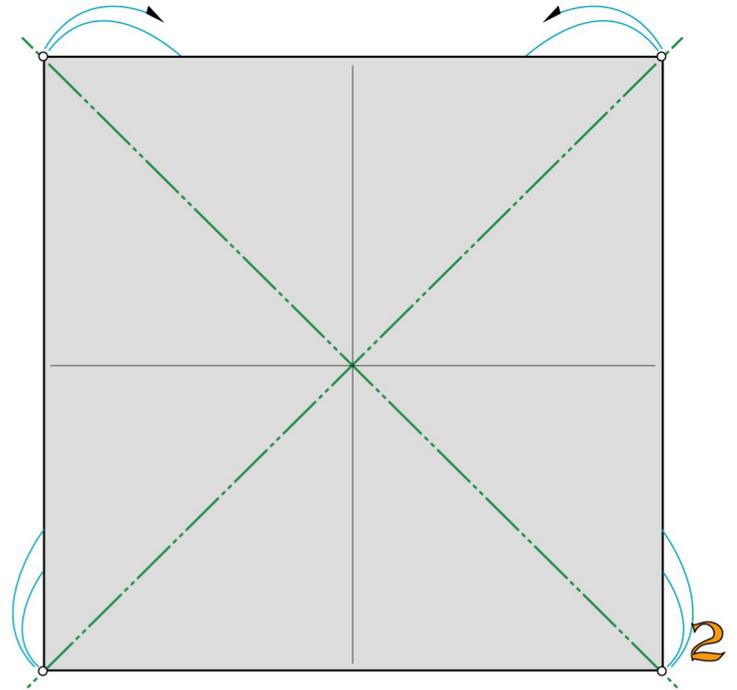
**Franco Pavarin 24**

Questo poliedro con struttura interna ad icosaedro è formato da 30 moduli composti da 1 "modulo di supporto 2" e 1 modulo per poliedri "I" strettamente legati. Adoperate fogli monocolori robusti di dimensione cm 10x5 per i moduli di supporto e cm 10x10 bicolori per i moduli I

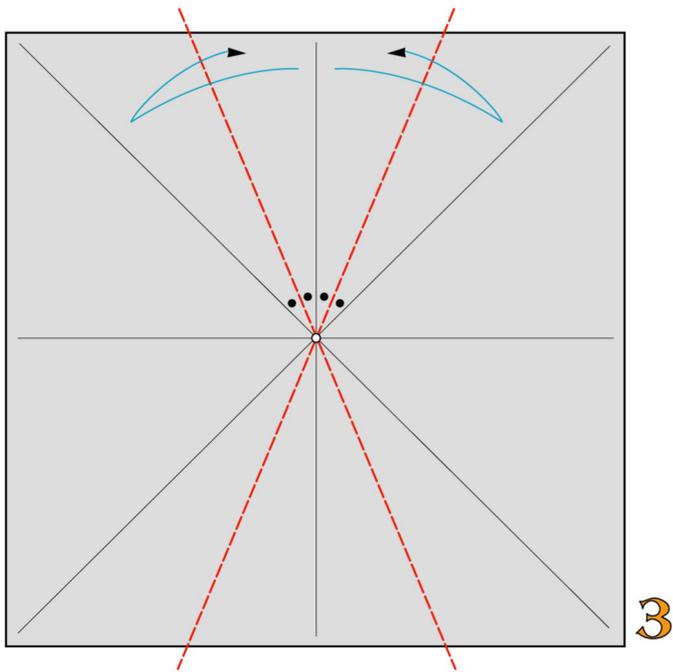




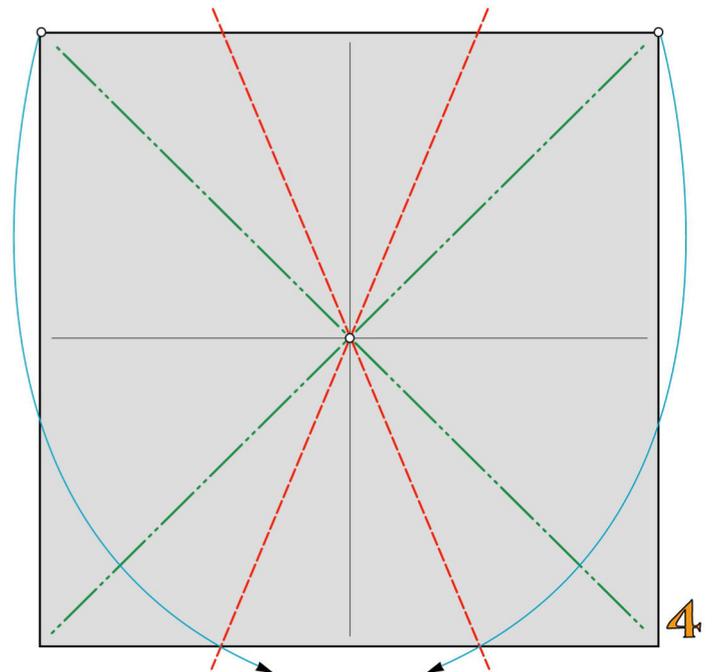
1 piega a valle e 1 a monte



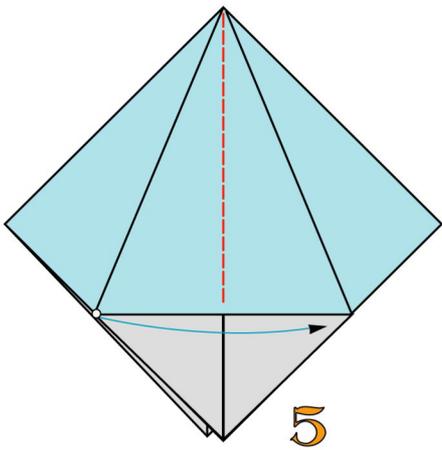
2 pieghe diagonali a monte



2 pieghe bisettrici a valle

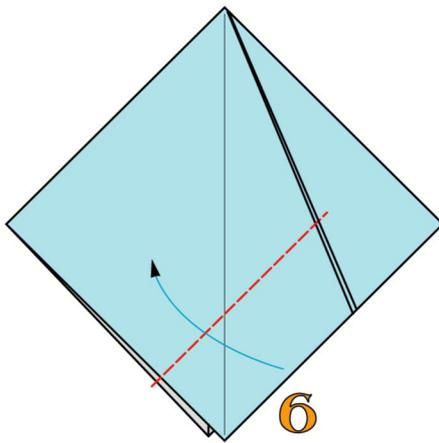


Ripiegate a valle e a monte



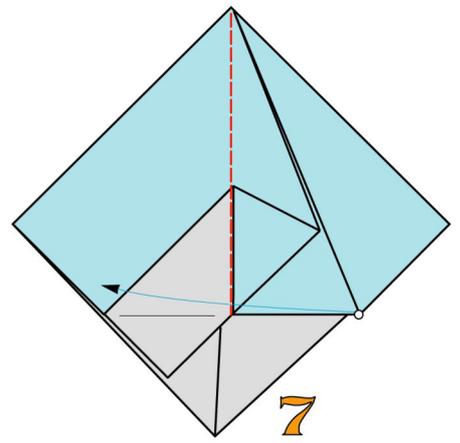
5

Ripiegate a valle



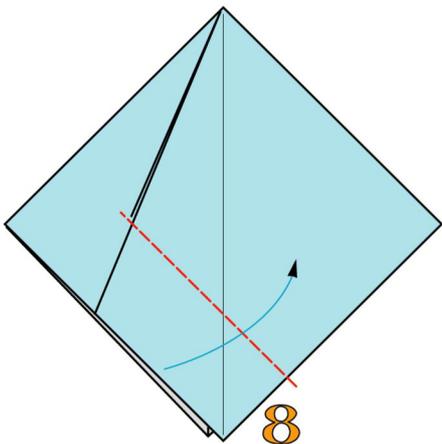
6

1 piega a valle



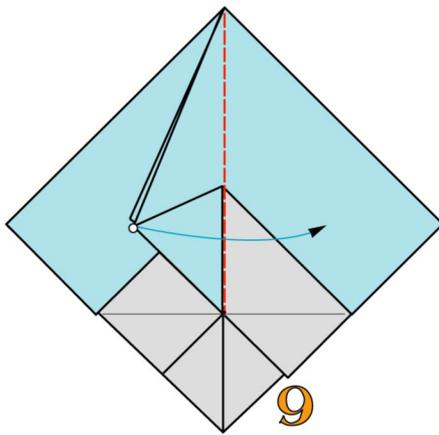
7

Ripiegate a valle



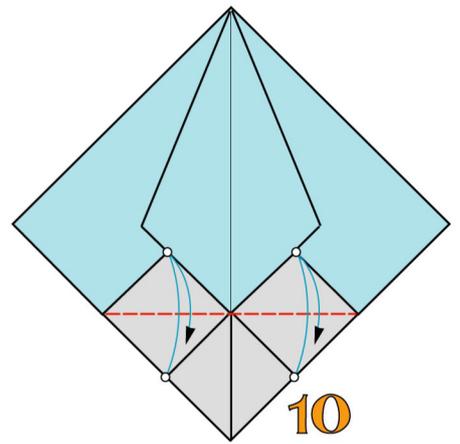
8

1 piega a valle



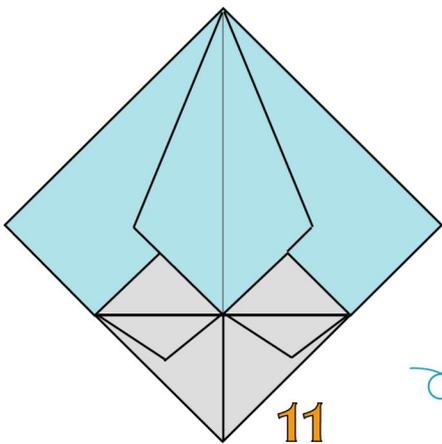
9

Ripiegate a valle



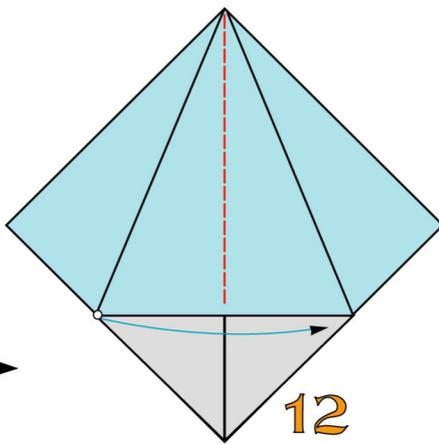
10

Ripiegate a valle



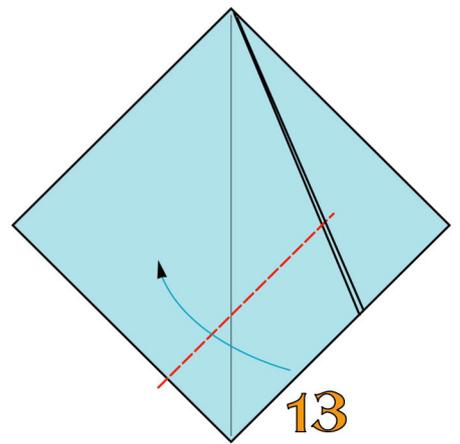
11

Ribaltate



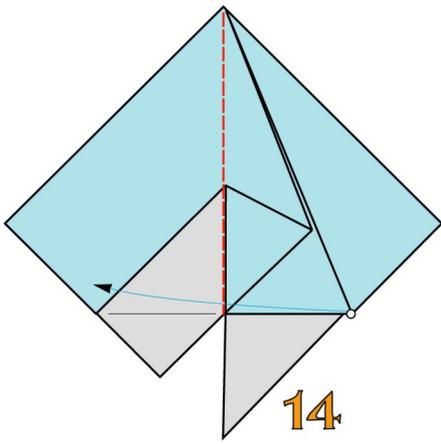
12

Ripiegate a valle



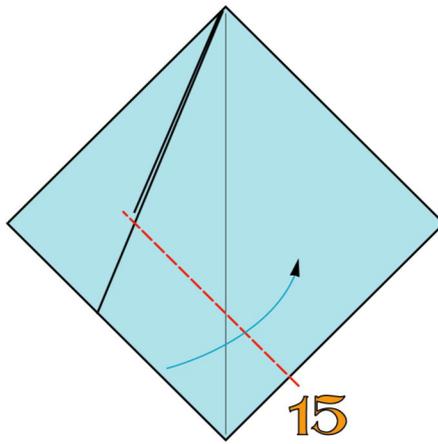
13

1 piega a valle



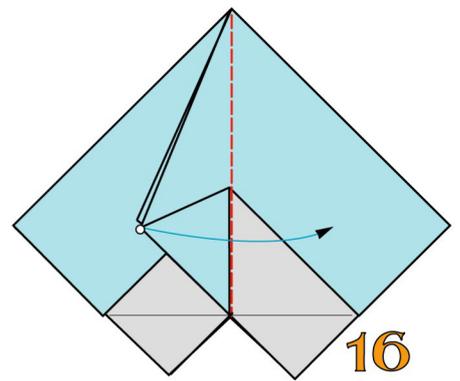
14

1 piega a valle



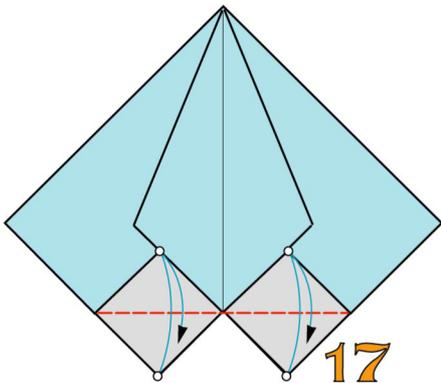
15

1 piega a valle



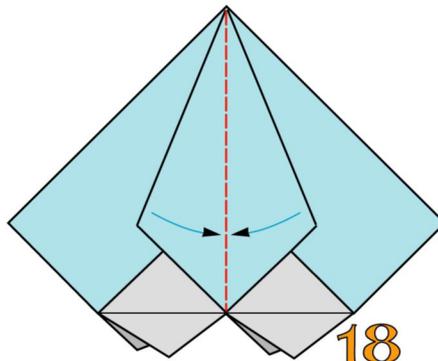
16

Ripiegate a valle



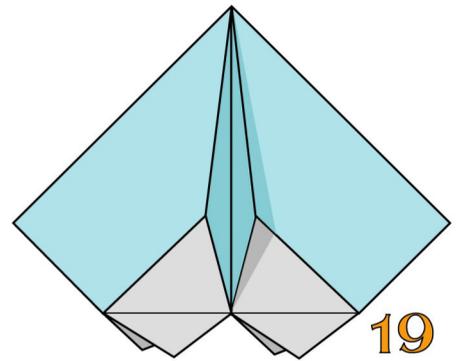
17

Ripiegate a valle



18

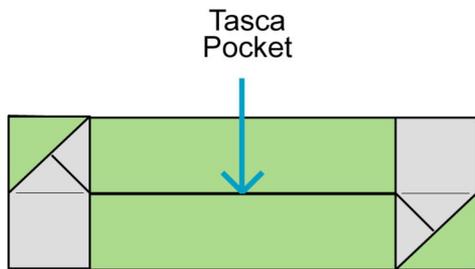
Ripiegate 3D davanti e dietro



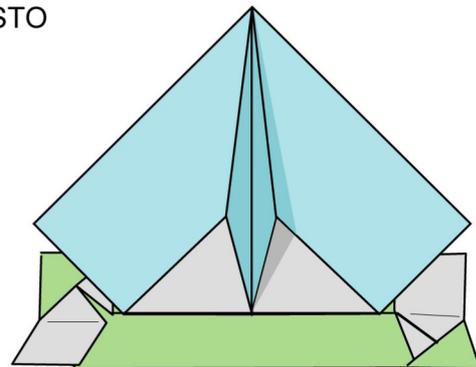
19

Modulo per poliedri "I" ultimato

MODULO COMPOSTO



1



2

Inserite il modulo "1" nella tasca del poliedro di supporto 2

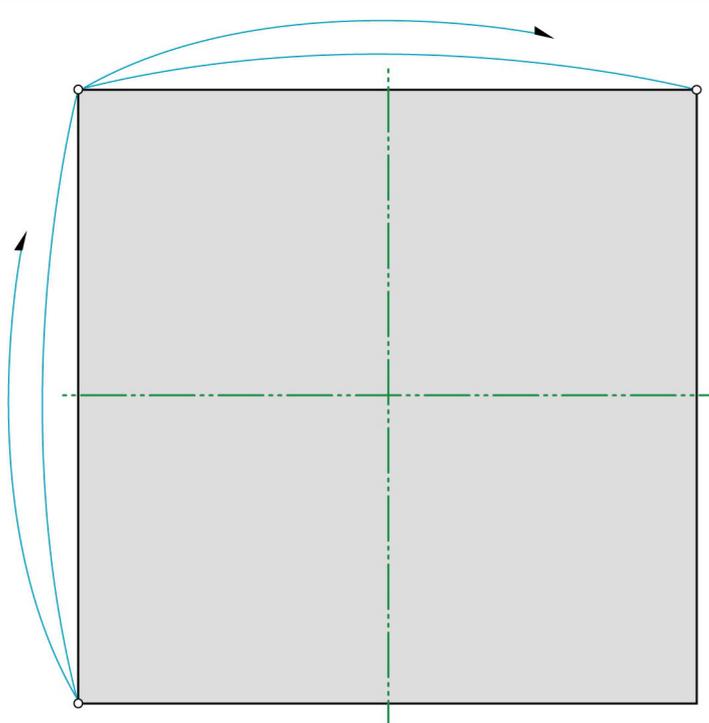
Modulo composto per Poliedro "E" ultimato

# POLIEDRO TRAFORATO "L"

**Franco Pavarin 24**

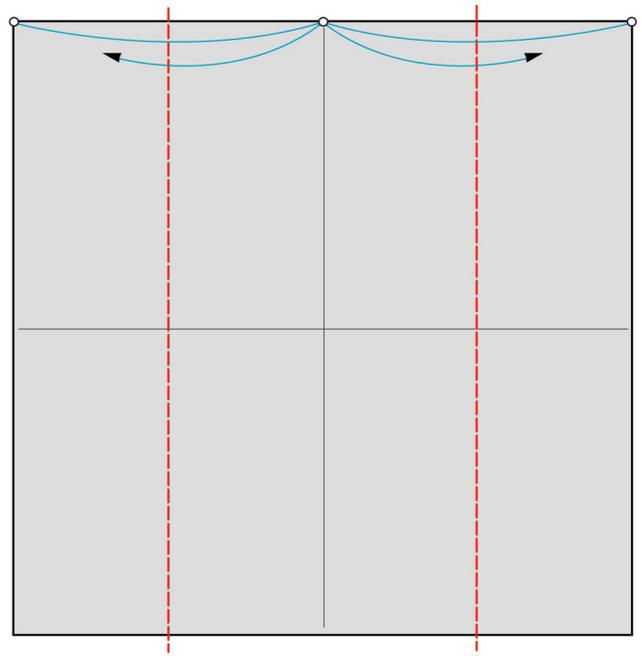
Questo poliedro con struttura interna ad icosaedro è formato da 30 moduli composti da 1 modulo di supporto e 1 modulo per poliedri "L" strettamente legati. Adoperate fogli monocolori robusti di dimensione cm 10x5 per i moduli di supporto e cm 10x10 leggeri per i moduli L





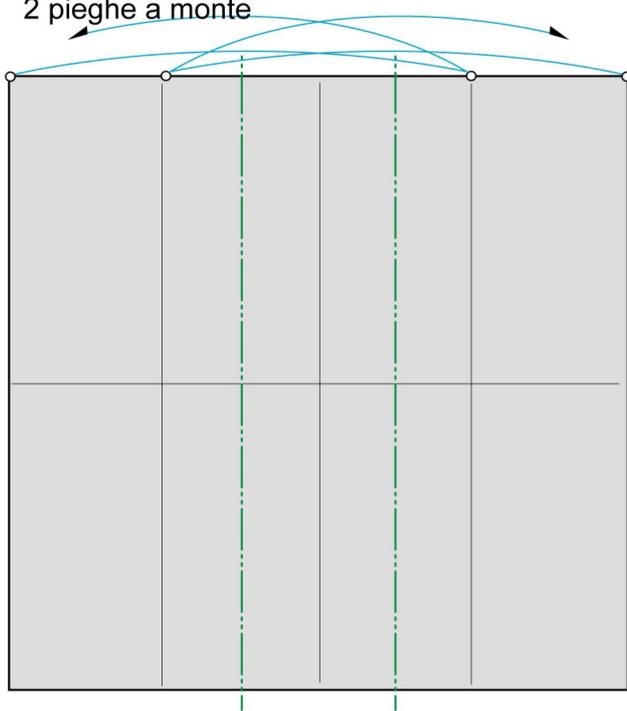
1

2 pieghe a monte



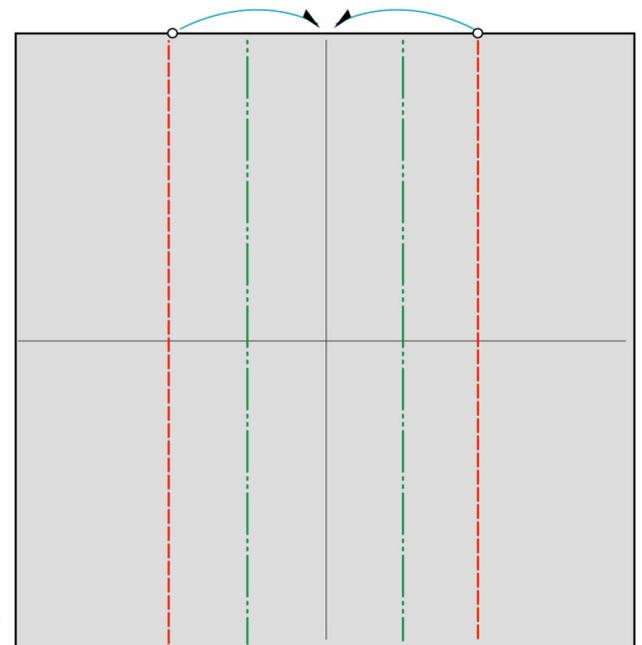
2

2 pieghe a valle



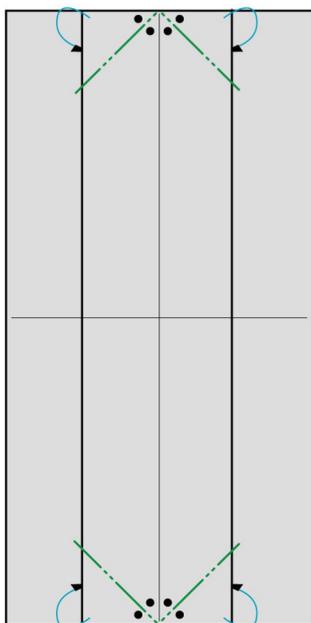
3

2 pieghe a monte



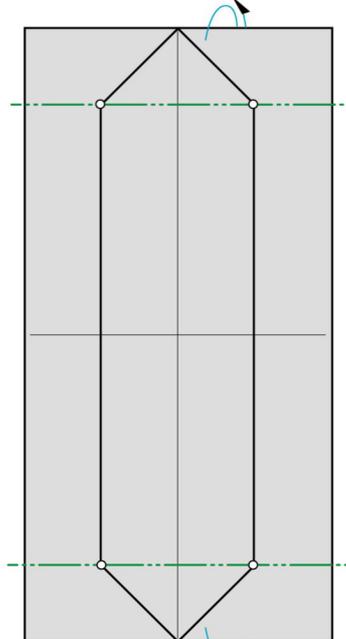
4

Ripiegate a valle e a monte



5

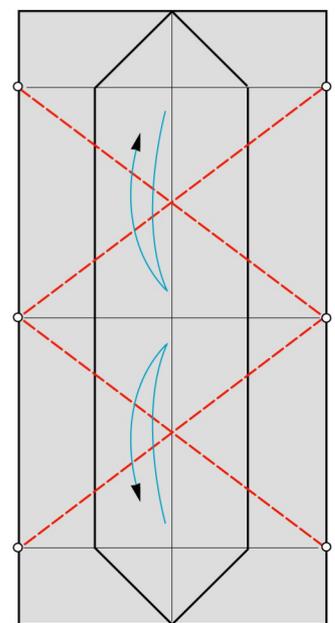
4 pieghe bisettrici a monte



6

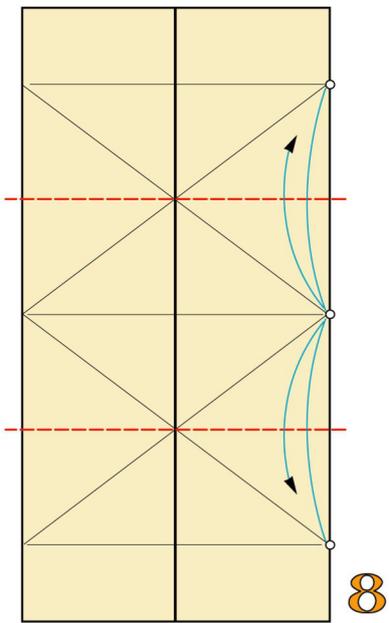
2 pieghe a monte

63



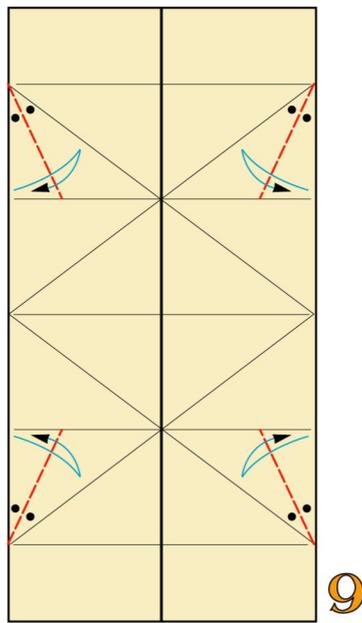
7

4 pieghe diagonali a valle e ribaltate



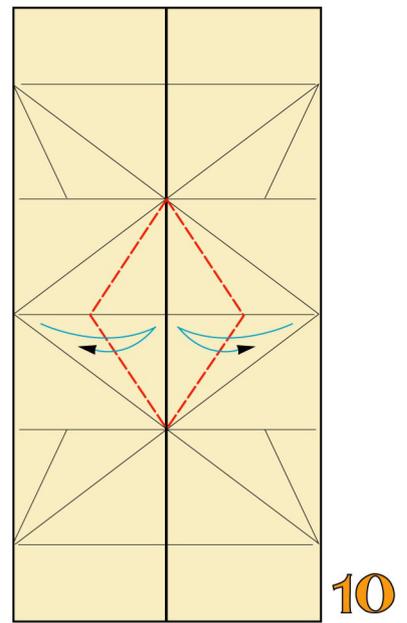
2 pieghe a valle

8



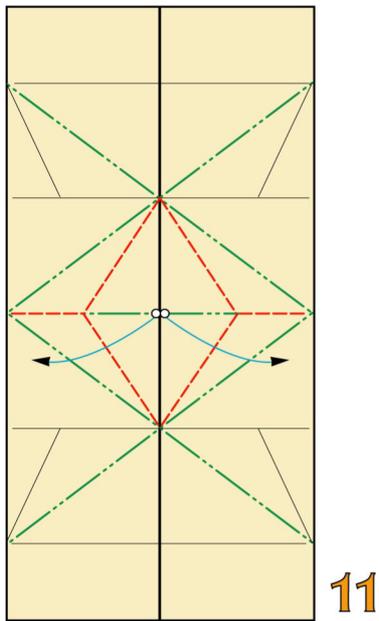
4 pieghe bisettrici a valle

9



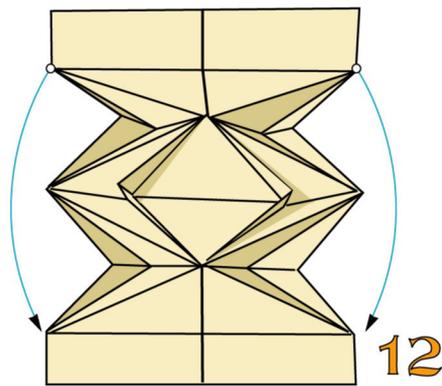
4 pieghe a valle

10



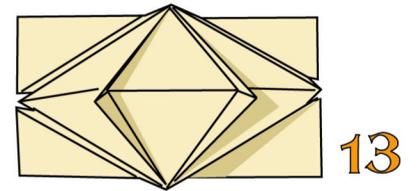
Ripiegando a valle e a monte modellate 3D

11



Comprimete

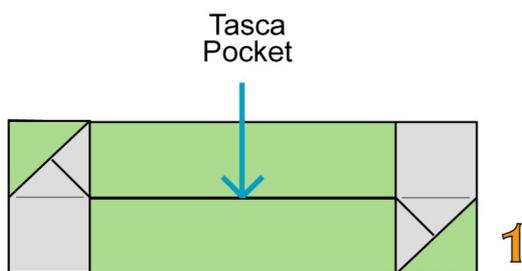
12



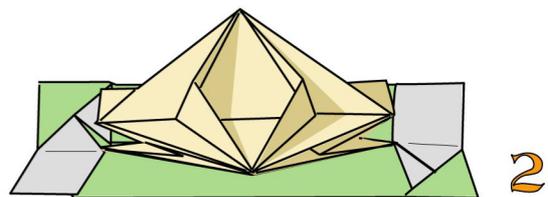
Modulo per poligoni "L" ultimato

13

### MODULO COMPOSTO



1



2

Inserite il modulo "1" nella tasca del poliedro di supporto 2

Modulo composto per Poliedro "L" ultimato

# POLIEDRO TRAFORATO "M"

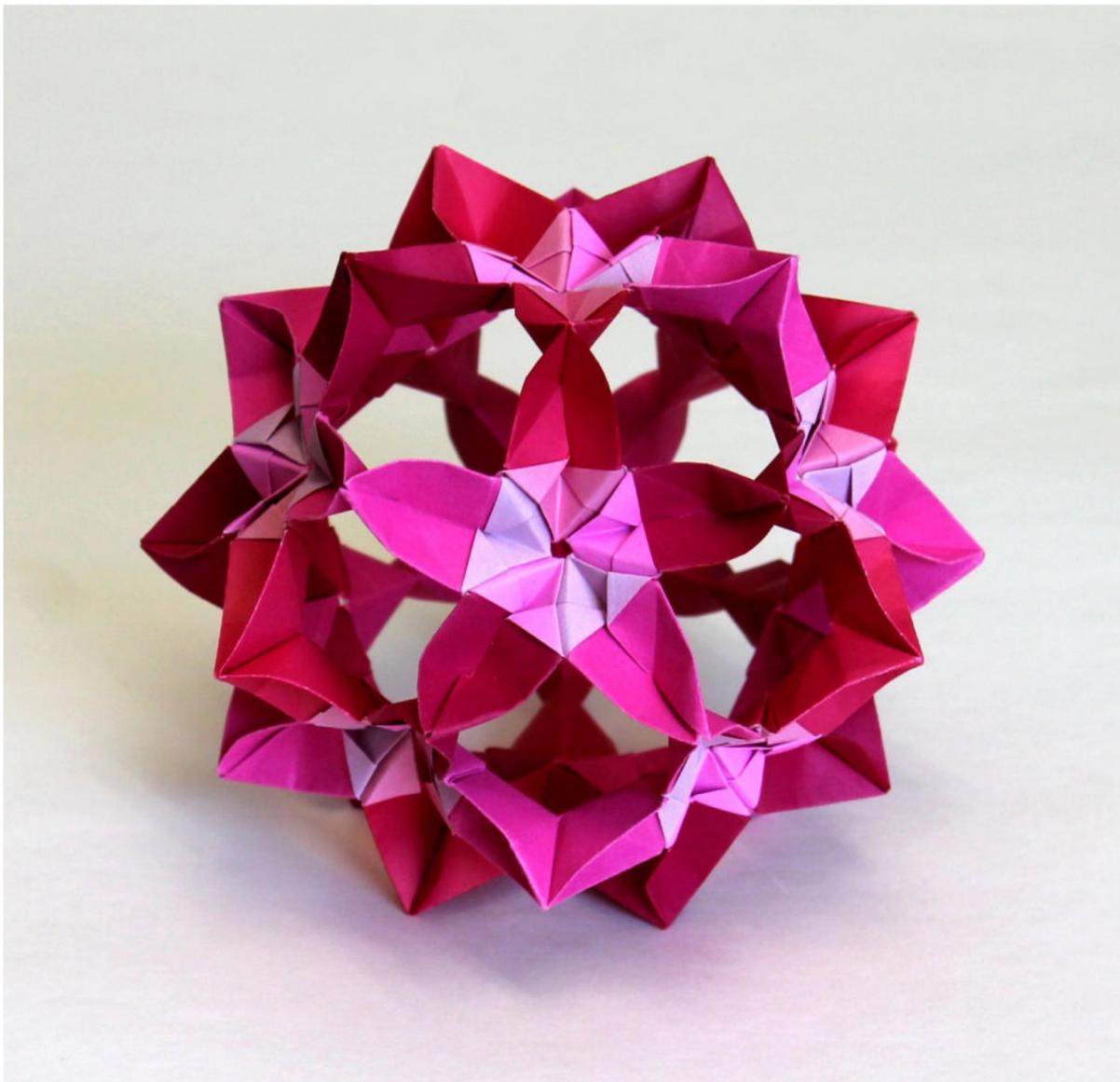
**Franco Pavarin 24**

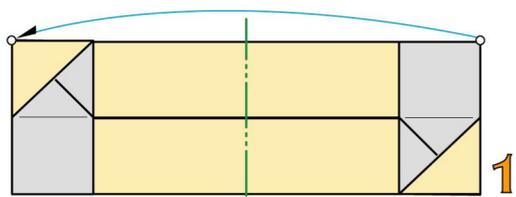
Con questo modulo è possibile costruire molti poliedri.

In questo caso si tratta di un icosaedro.

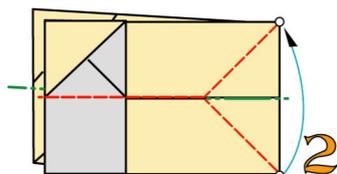
Questo modulo è un'elaborazione del modulo di supporto 2.

Adoperate 30 fogli di carta bicolore di medio peso delle dimensioni di cm 10x5

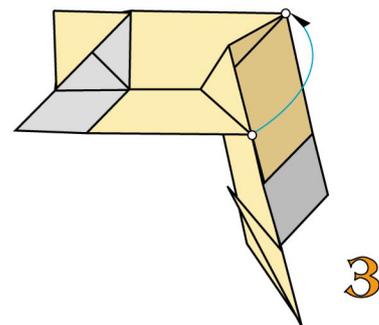




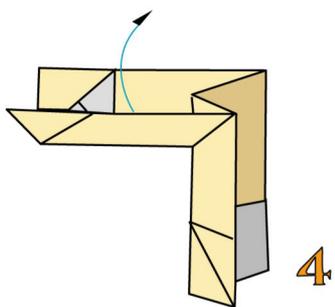
Partite dal modulo di supporto "2".  
1 piega a monte



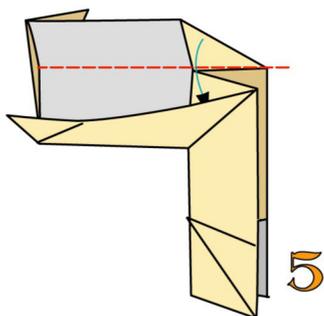
2 pieghe a valle e ripiegate



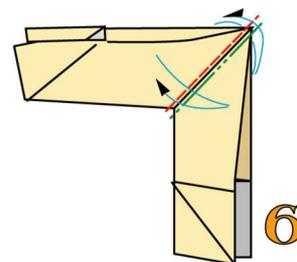
3



Aprite 1 bordo interno



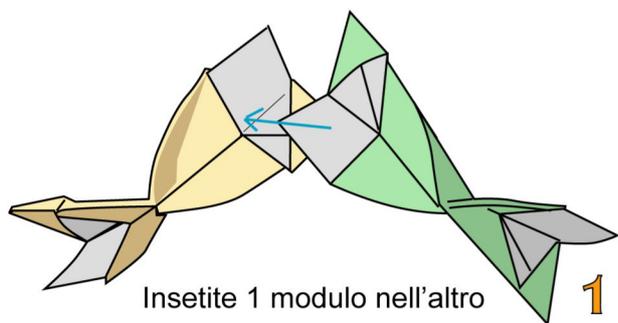
Richiudete il bordo



Ripiegate a valle e a monte

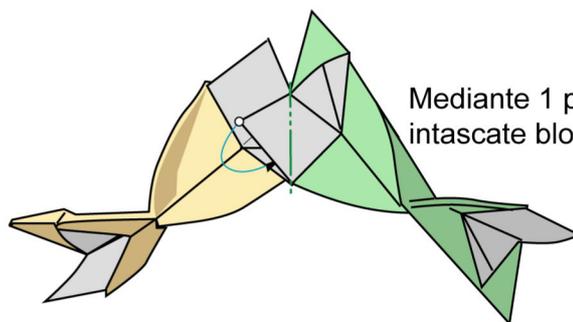
6

### UNIONE DEI MODULI



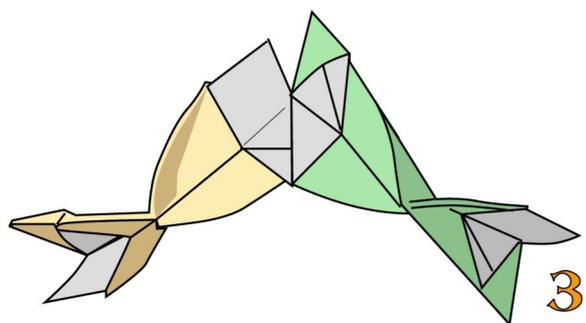
Insetite 1 modulo nell'altro

1



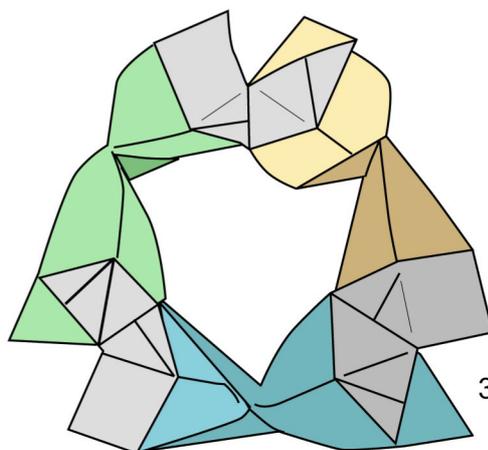
Mediante 1 piega a monte  
intascate bloccando l'unione

2



Unione completata. Aggiungete altri moduli

3

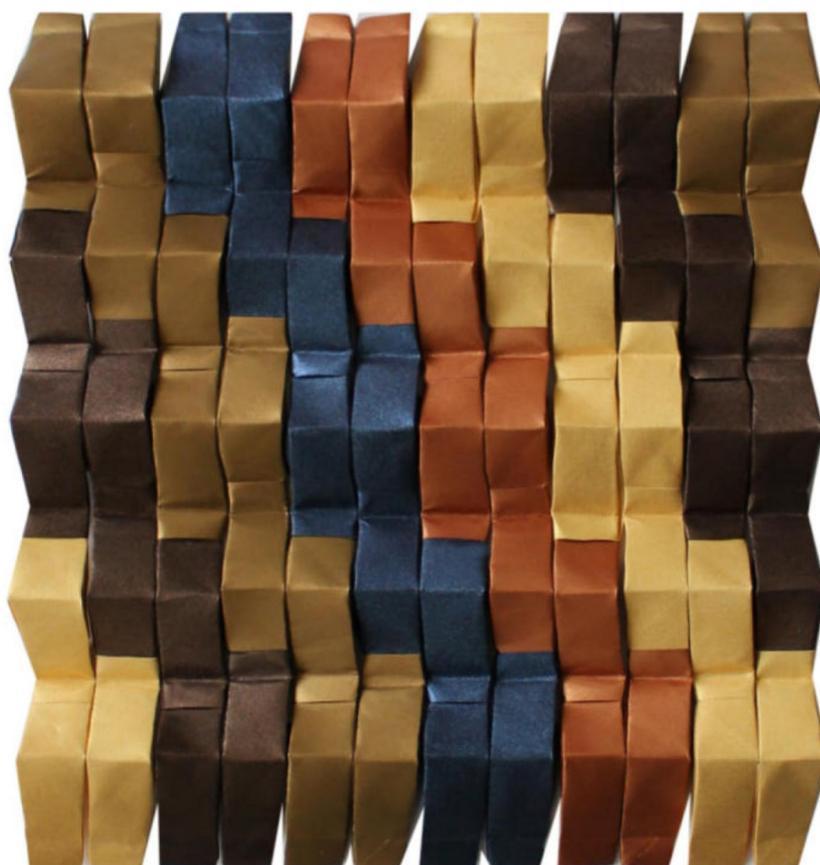


3 moduli uniti

# TASSELLAZIONE "A" MODULARE COMPATTA 3D

**Franco Pavarin 24**

Si costruiscono 2 tipi di moduli, uno simmetrico all'altro.  
Adoperate carta monocoloro robusta delle dimensioni cm 12x6

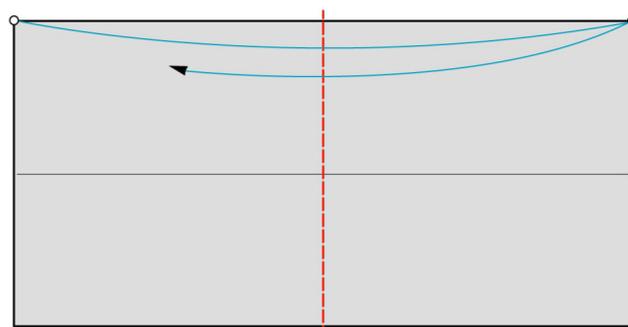


MODULO PER TASSELLAZIONE 3D "A" SINISTRO



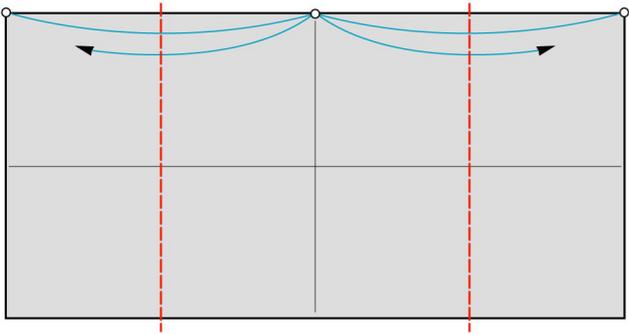
1 piega a valle

1



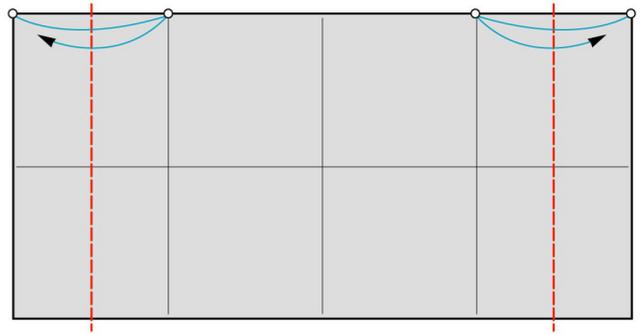
2 piccole pieghe a valle

2



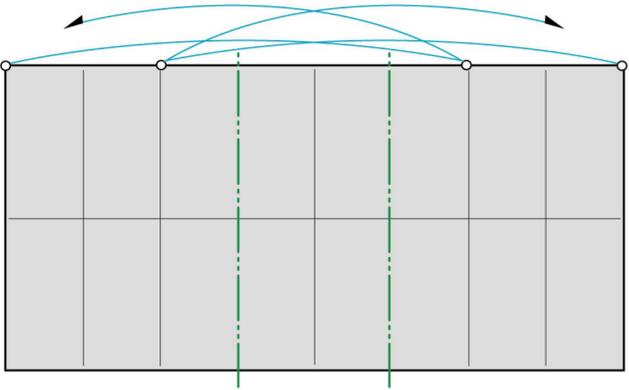
3

2 pieghe a valle



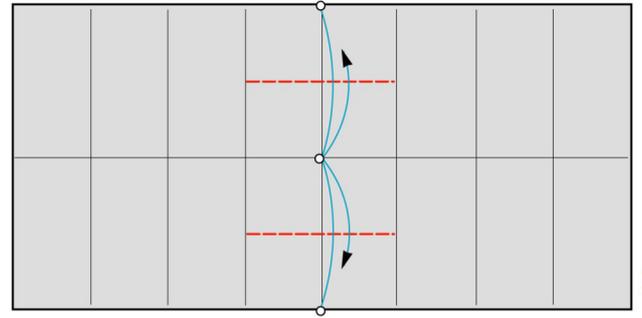
4

2 pieghe a valle



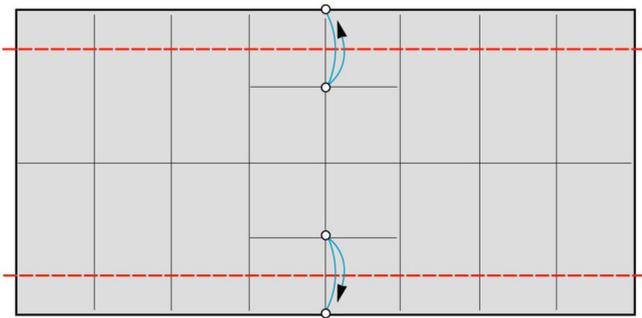
5

2 pieghe a monte



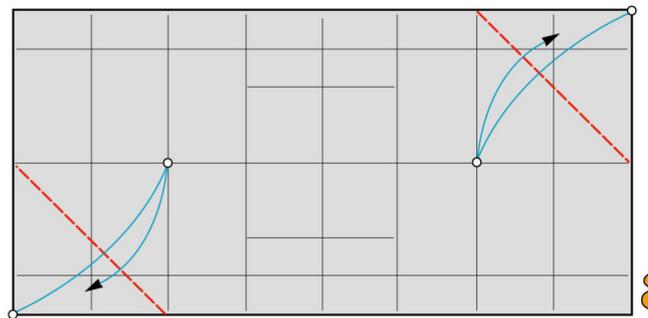
6

2 pieghe a valle



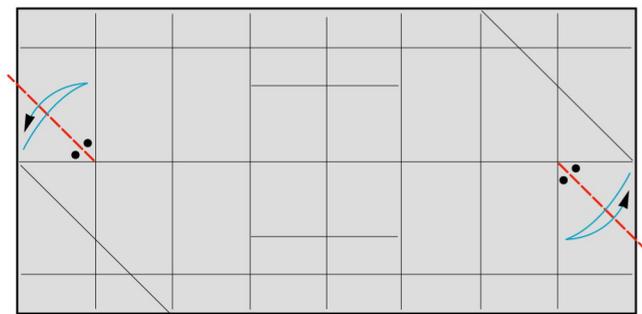
7

2 pieghe a valle



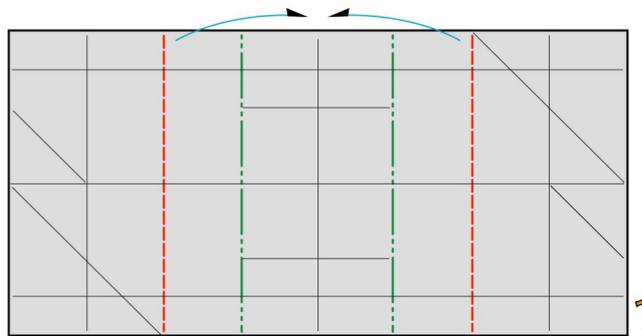
8

2 pieghe diagonali a valle



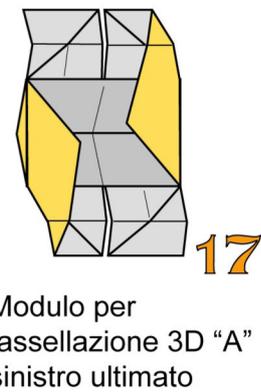
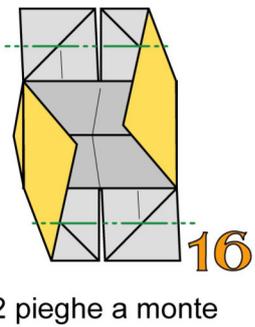
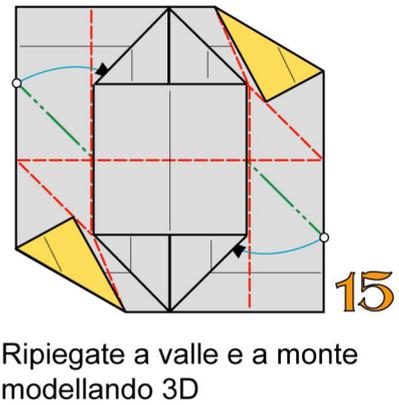
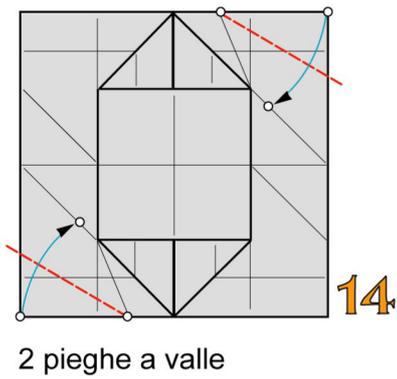
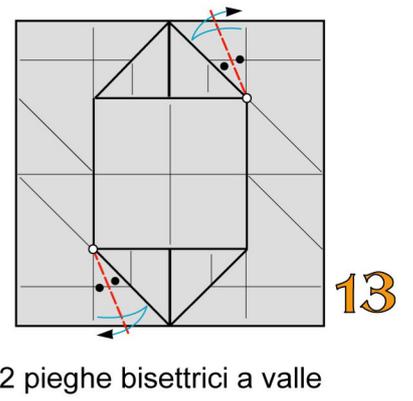
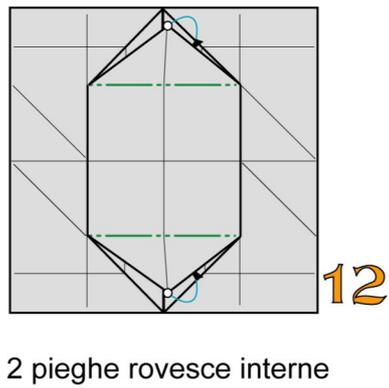
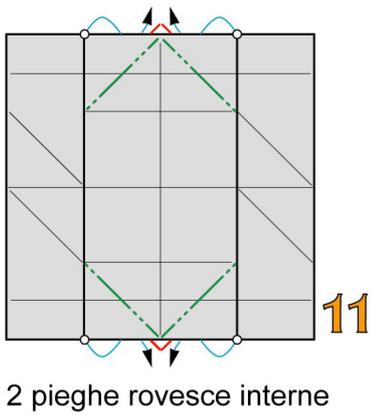
9

2 pieghe bisettrici a valle

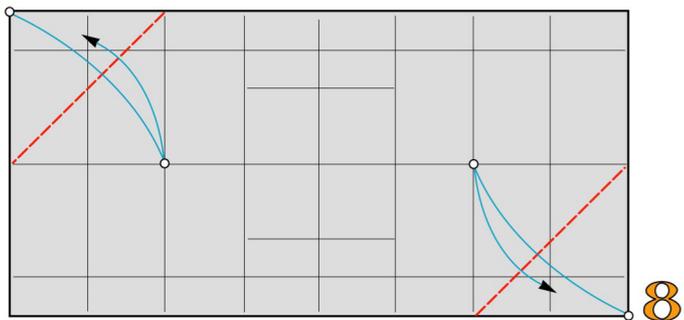


10

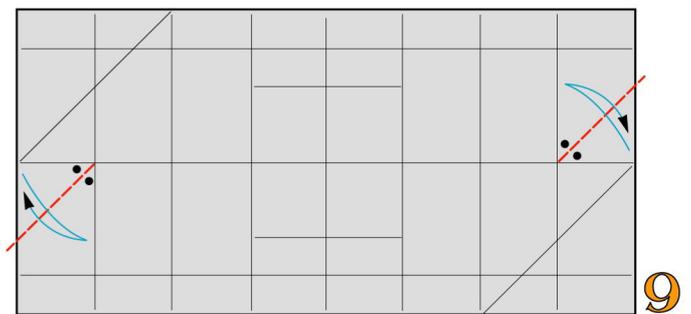
Ripiegare a valle e a monte



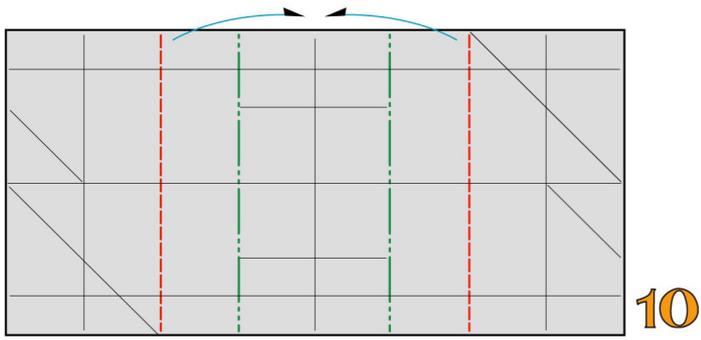
MODULO PER TASSELLAZIONE 3D "A" DESTRO



Partite dalla figura precedente n. 7  
2 pieghe diagonali a valle

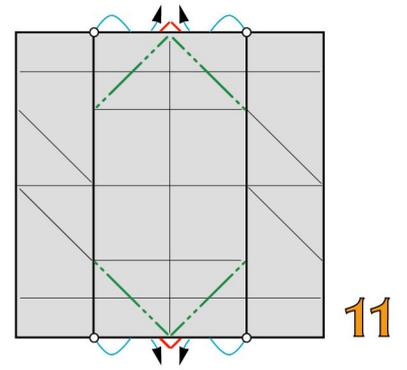


2 pieghe bisettrici a valle



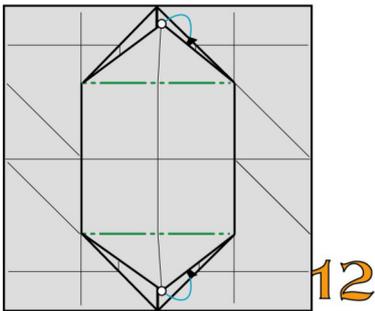
10

Ripiegate a valle e a monte



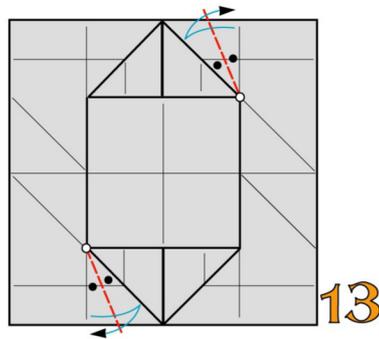
11

2 pieghe rovesce interne



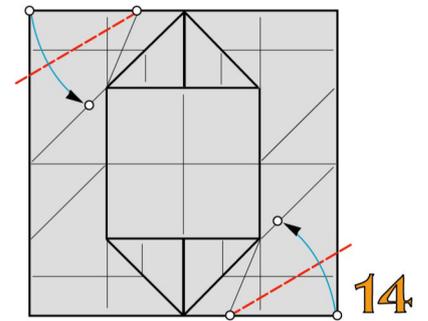
12

2 pieghe rovesce interne



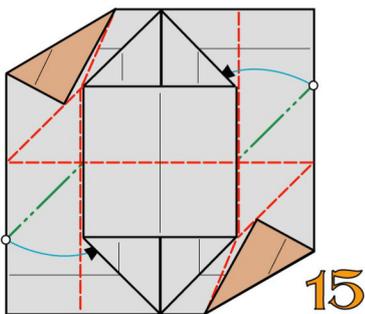
13

2 pieghe bisettrici a valle



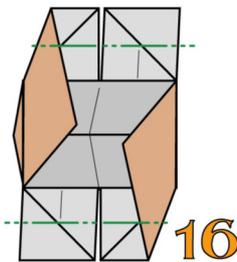
14

2 pieghe a valle



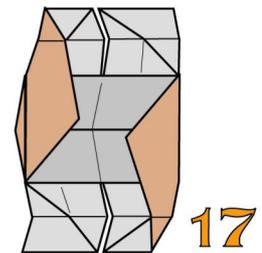
15

Ripiegate a valle e a monte modellando 3D



16

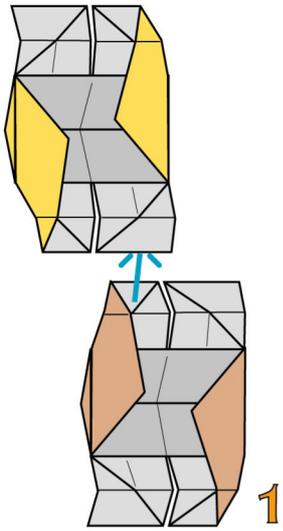
2 pieghe a monte



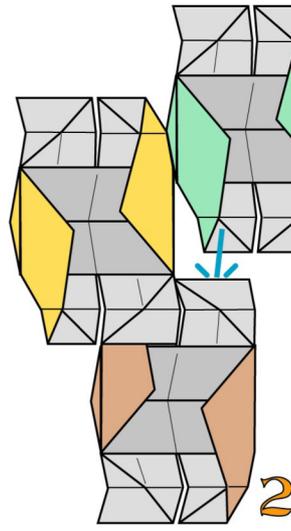
17

Modulo per tassellazione 3D "A" sinistro ultimato

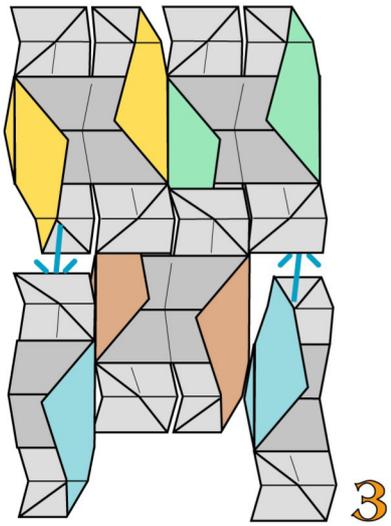
# UNIONE DEI MODULI



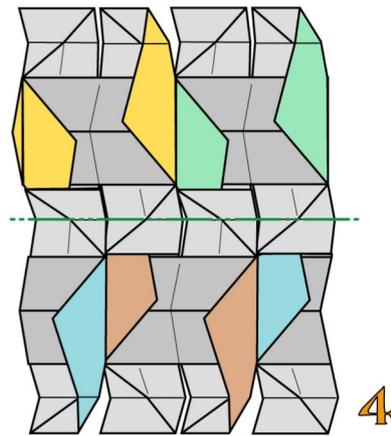
1  
Intascate un modulo destro  
in uno sinistro



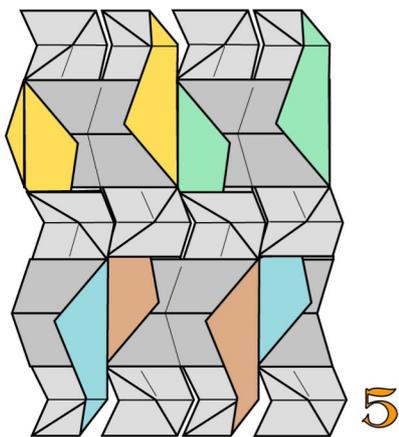
2  
Intascate un nuovo modulo



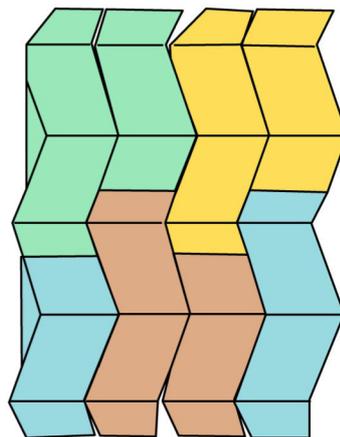
3  
Intascate due semimoduli



4  
Mediante una piega a  
monte rinforzate l'unione



5  
Ribaltate



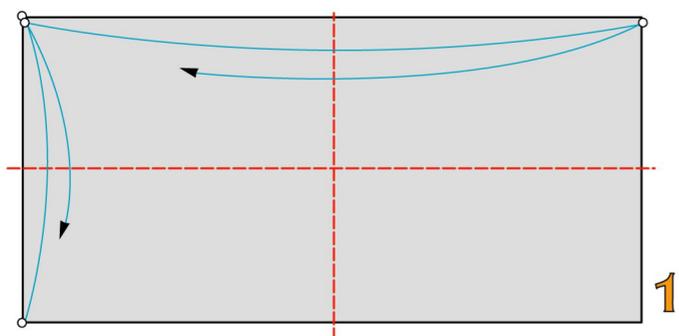
# TASSELLAZIONE "A" MODULARE TRAFORATA

**Franco Pavarin 24**

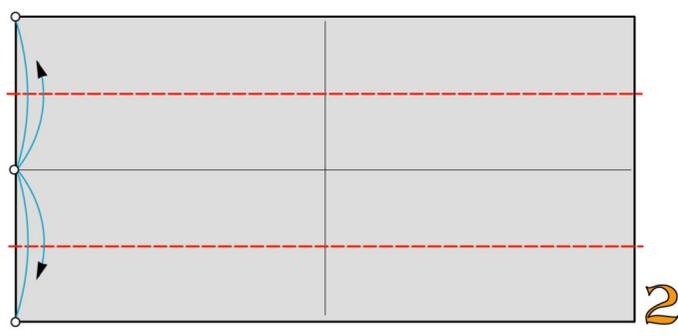
Questa semplice tassellazione è formata dall'unione di più moduli composti.

Ogni modulo composto è formato unendo 6 foglietti di carta monocolori pesanti delle dimensioni di cm 7,5x15

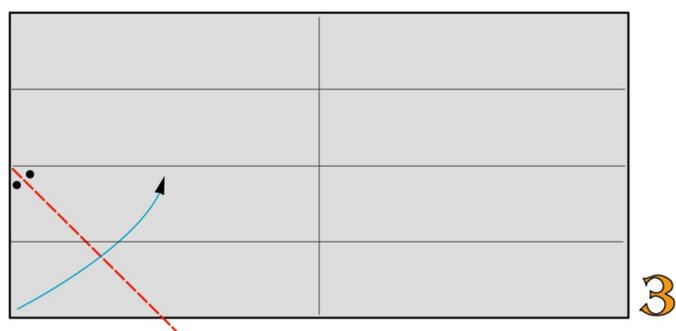




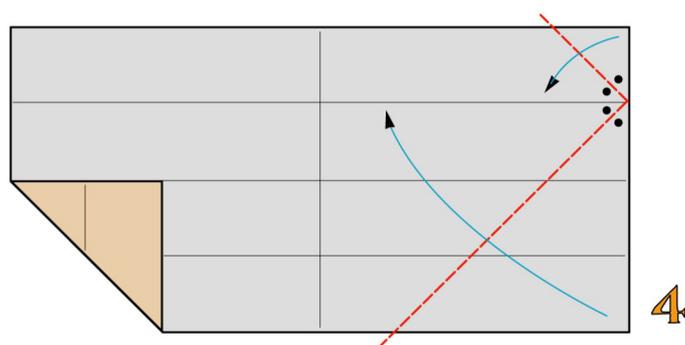
2 pieghe a valle



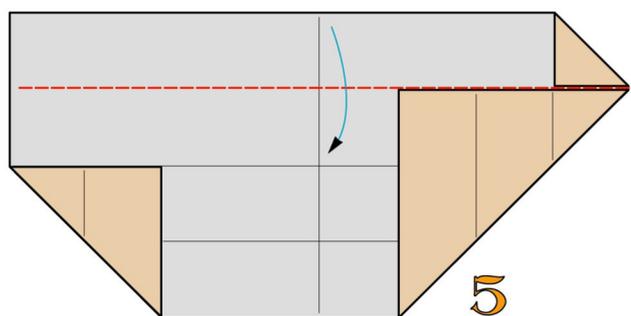
2 pieghe a valle



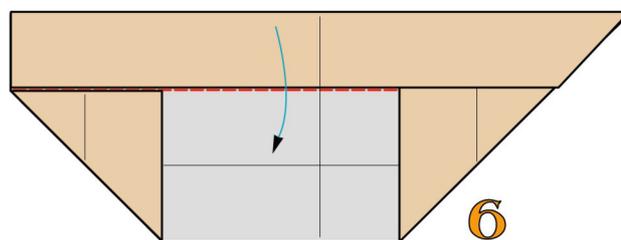
1 piega bisettrice a valle



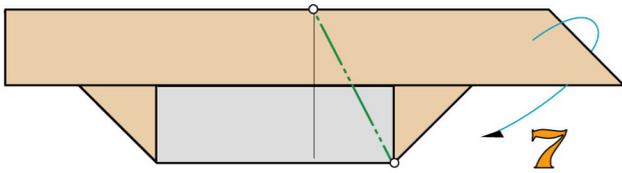
2 pieghe bisettrici a valle



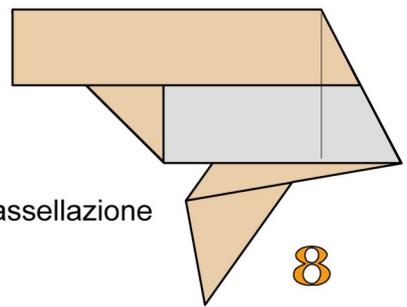
Ripiegate a valle



Ripiegate a valle

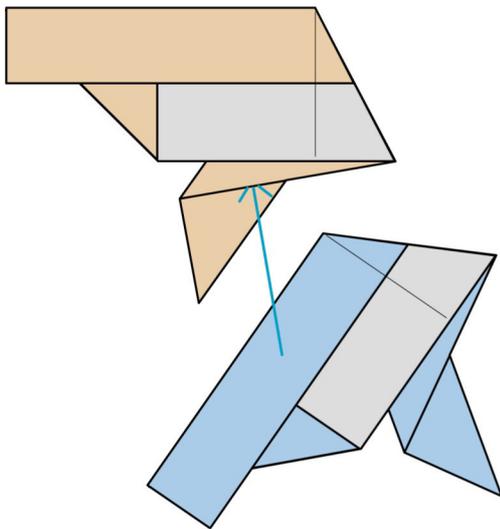


1 piega a monte

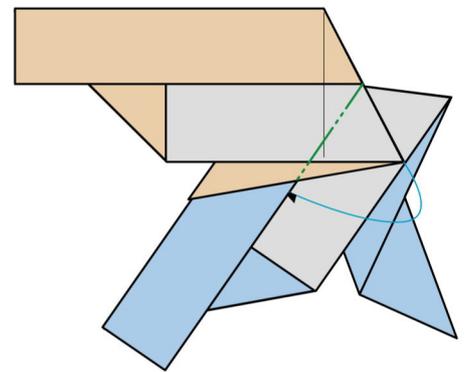


Modulo per tassellazione  
"A" ultimato

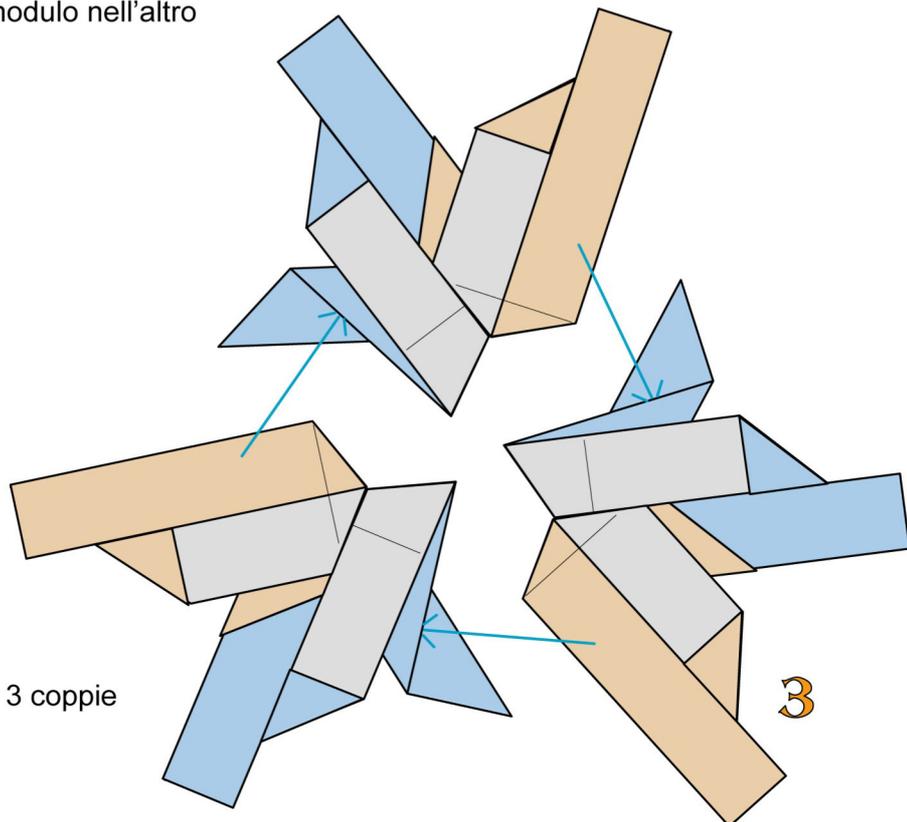
UNIONE DEI MODULI



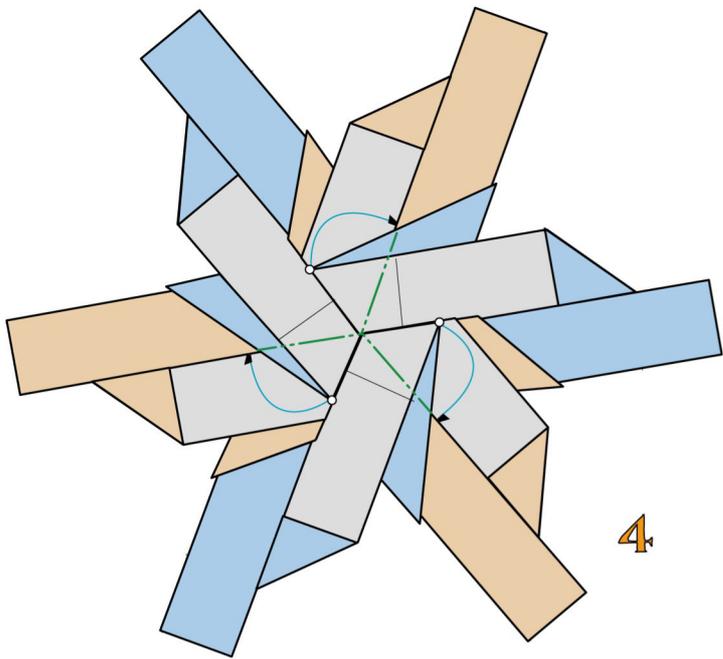
Inserite un modulo nell'altro



Mediante 1 piega a monte  
boccate l'unione

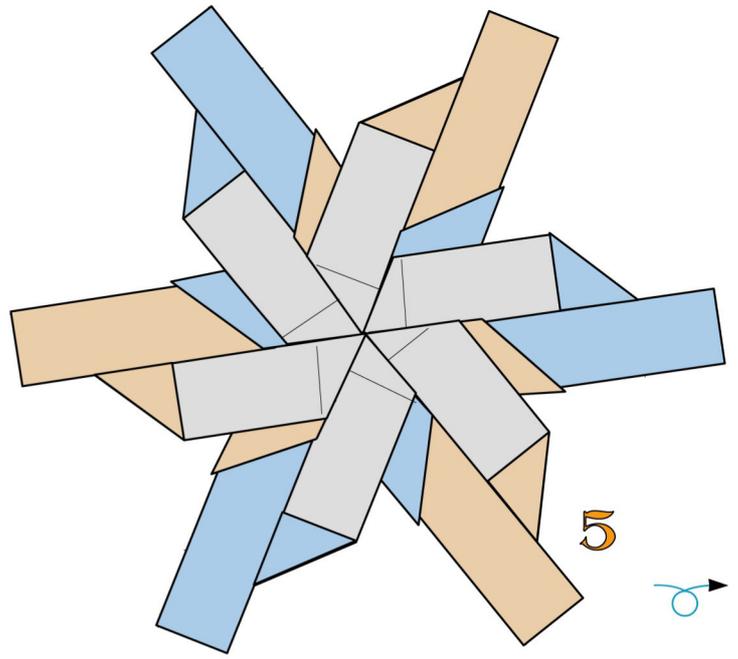


Costruite ed unite 3 coppie  
di moduli



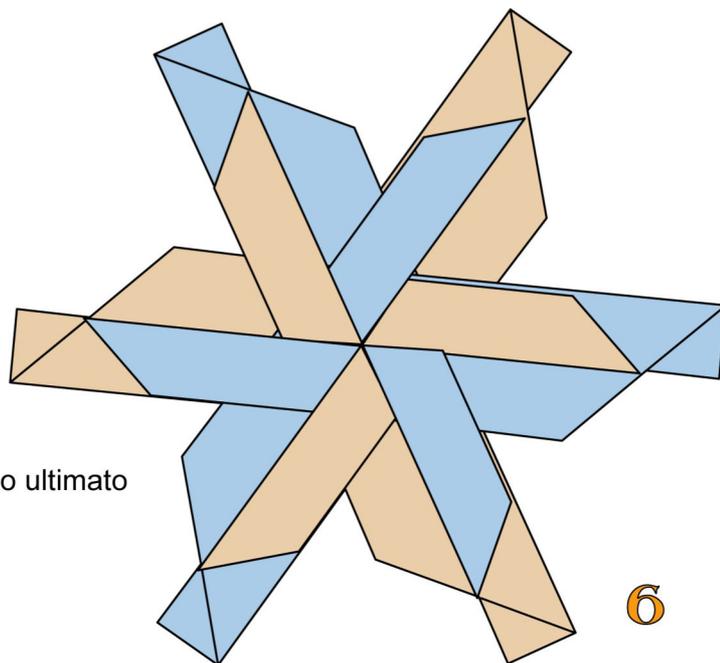
4

Modulo composto.  
Mediante 3 pieghe a monte  
bloccate l'unione



5

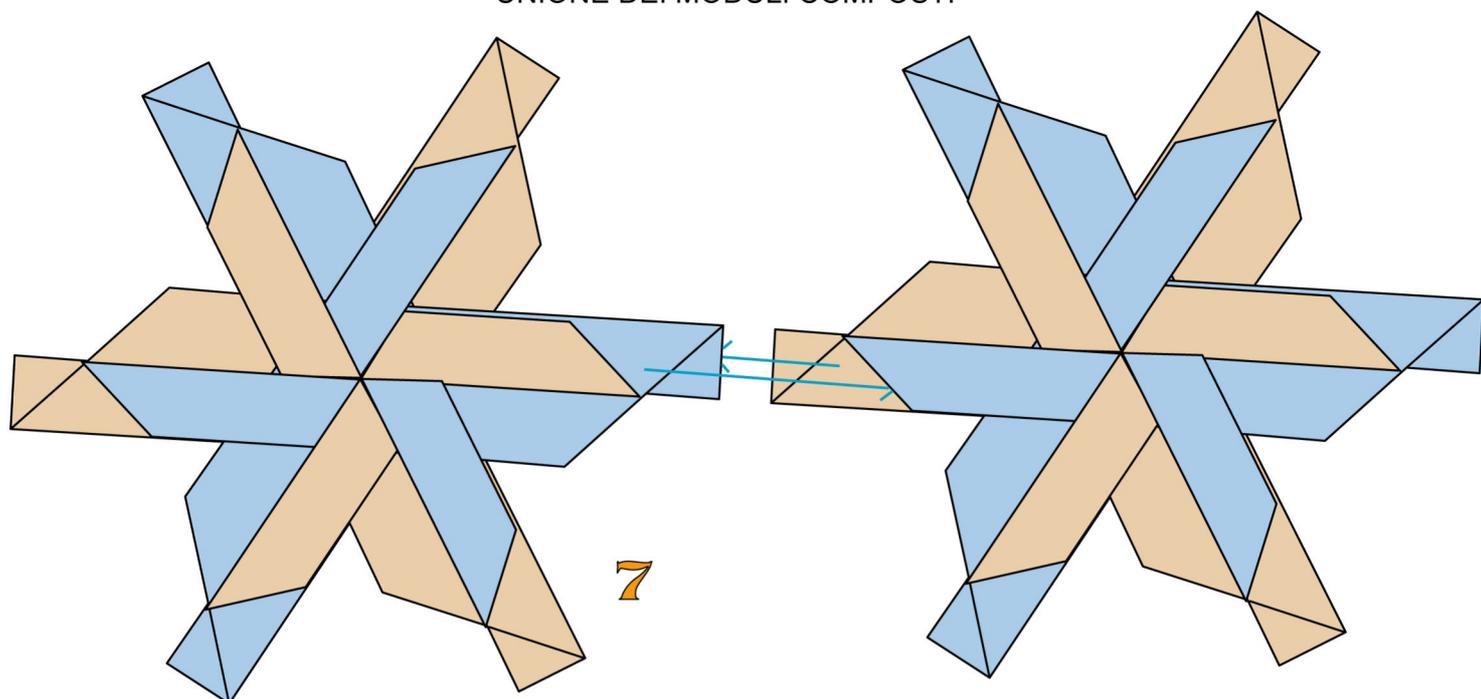
Ribaltate



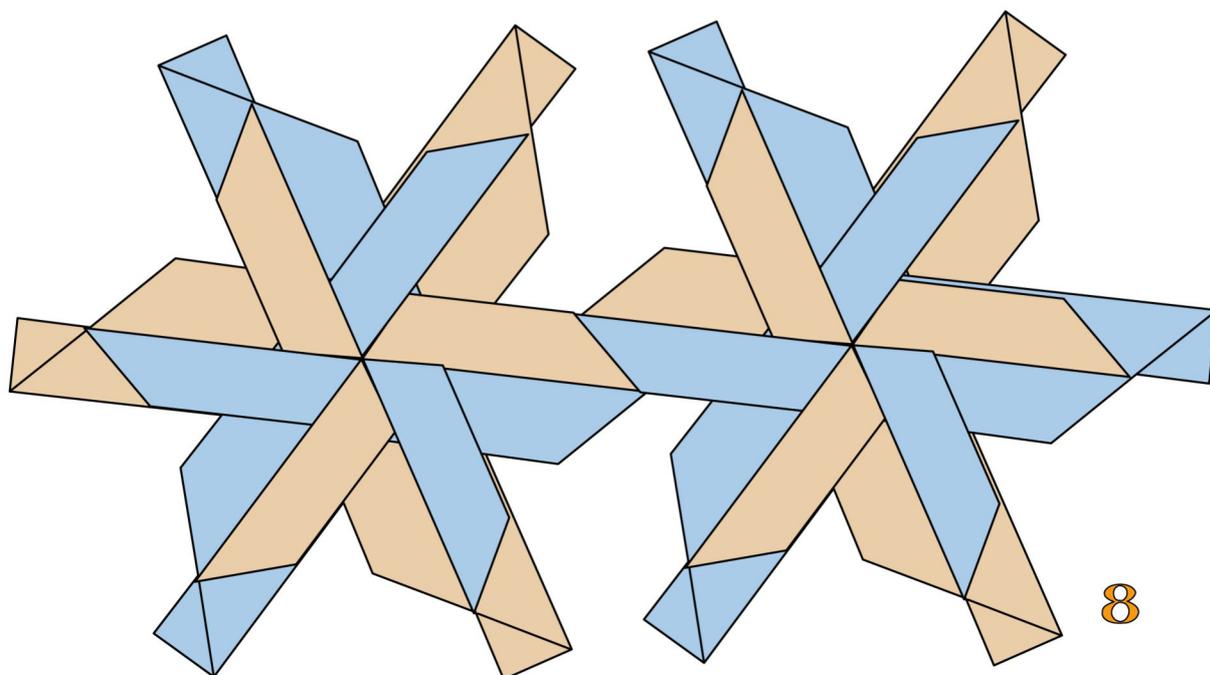
Modulo composto ultimato

6

UNIONE DEI MODULI COMPOSTI



Inserite reciprocamente 1 modulo nell'altro



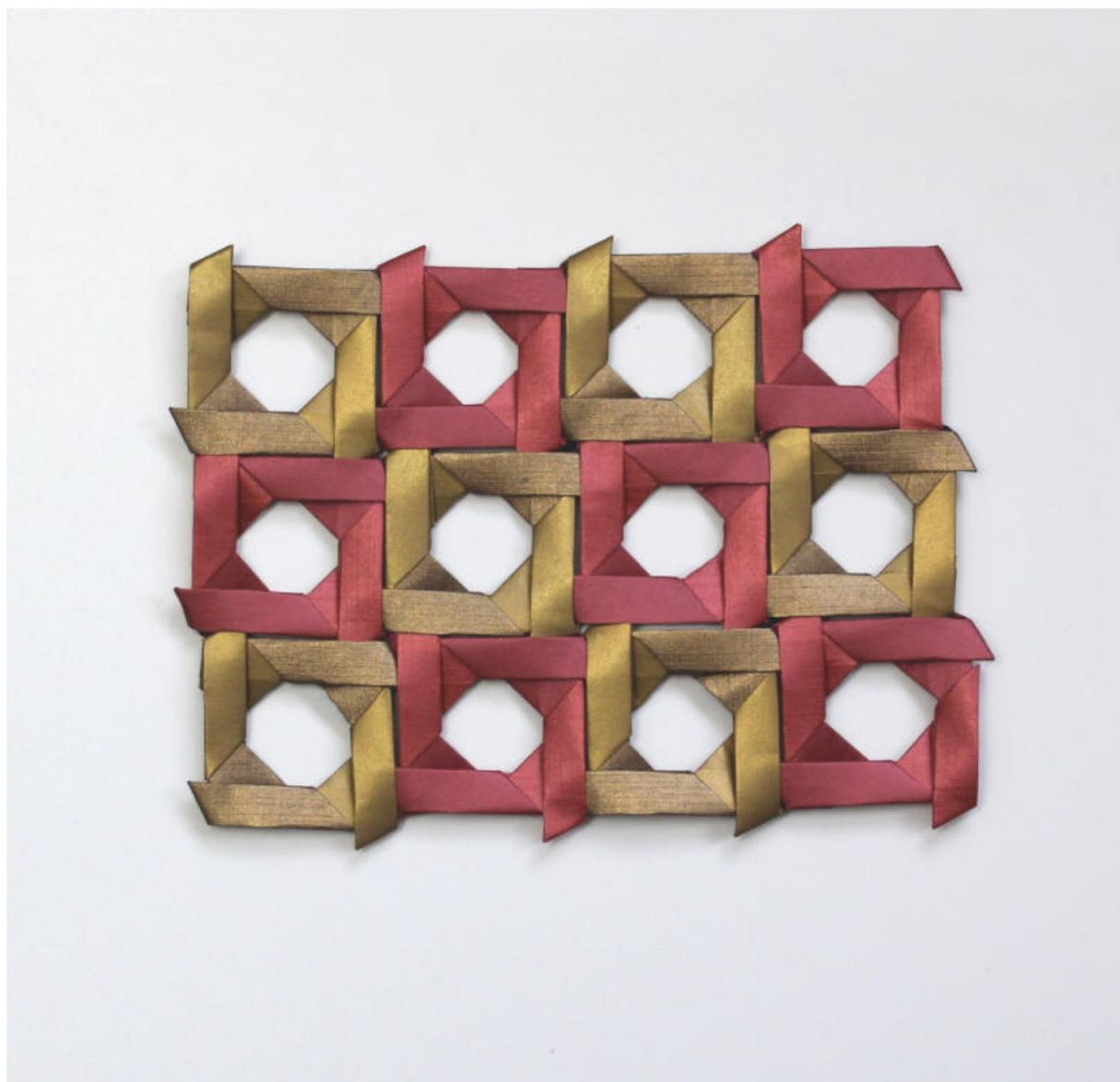
Unione di 2 moduli composti ultimata

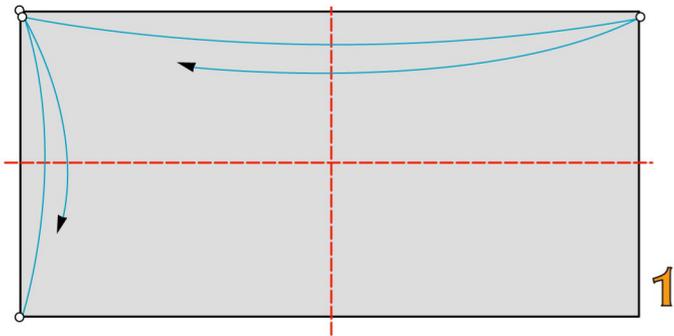
# TASSELLAZIONE "B" MODULARE TRAFORATA

## **Franco Pavarin 24**

Questa tassellazione è formata dall'unione di più moduli composti.

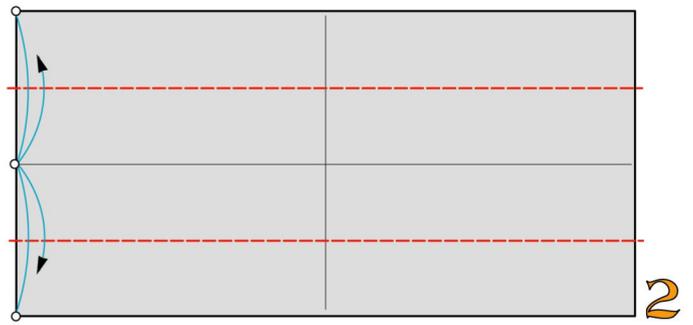
Ogni modulo composto è formato unendo 4 foglietti di carta monocolora pesante delle dimensioni di cm 7,5x15





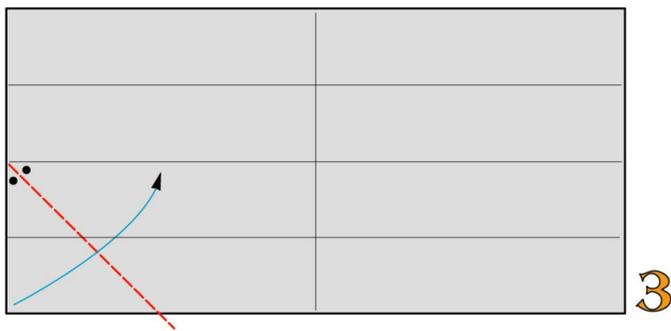
1

2 pieghe a valle



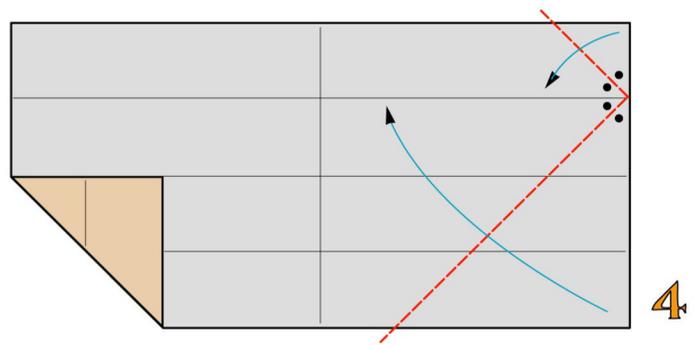
2

2 pieghe a valle



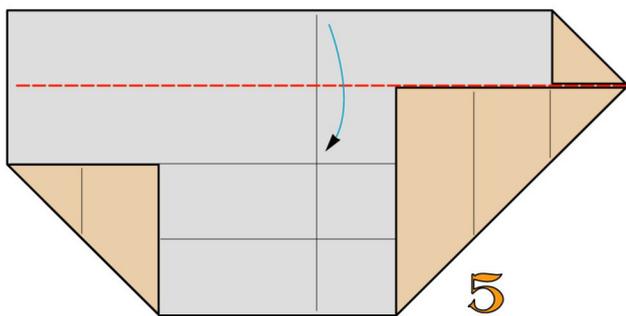
3

1 piega bisettrice a valle



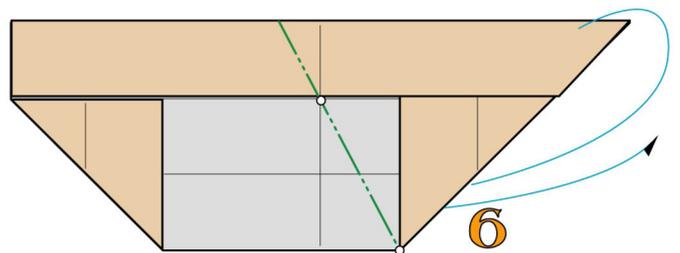
4

2 pieghe bisettrici a valle

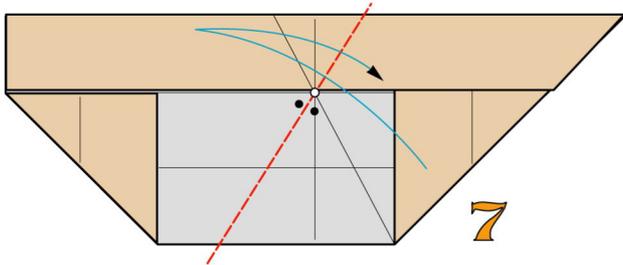


5

Ripiegate a valle

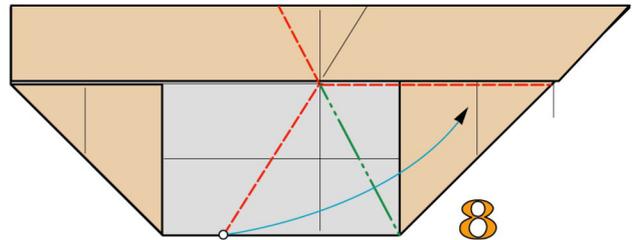


6



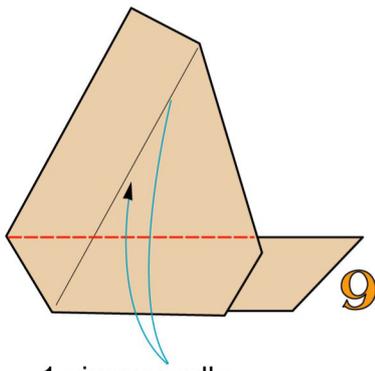
1 piega bisettrice a valle

7



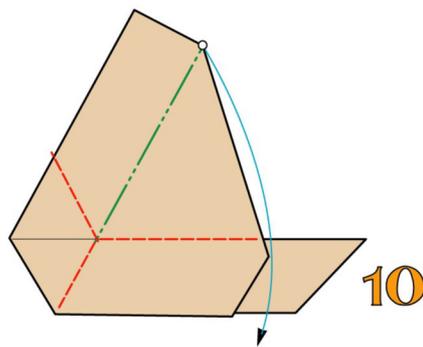
Ripiegate a valle e a monte

8



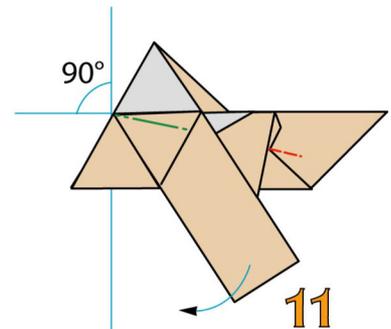
1 piega a valle

9



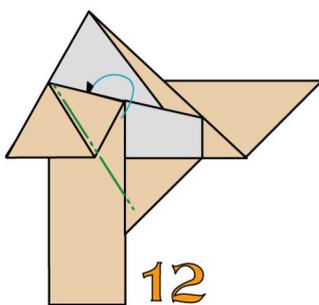
Ripiegate a valle e a monte

10



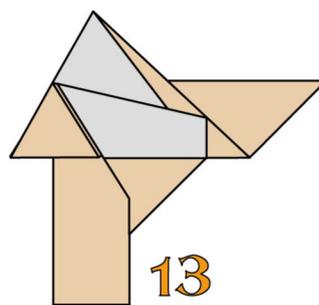
1 piega a monte e  
1 a valle interna

11



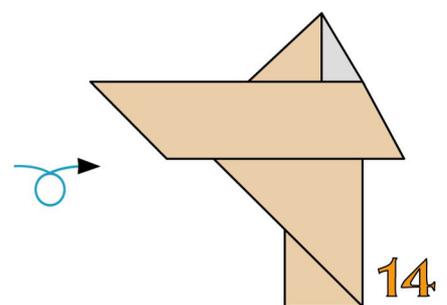
1 piega a monte

12



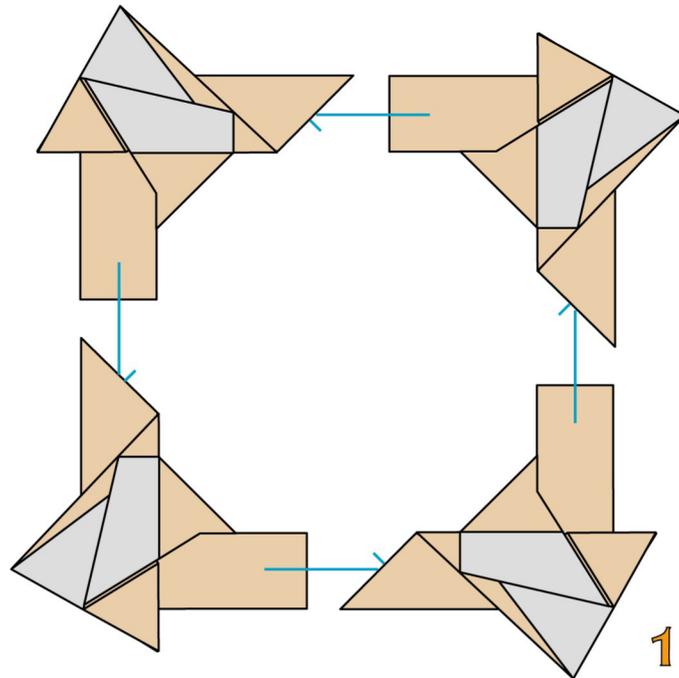
Modulo per tassellazione  
"B" ultimato

13

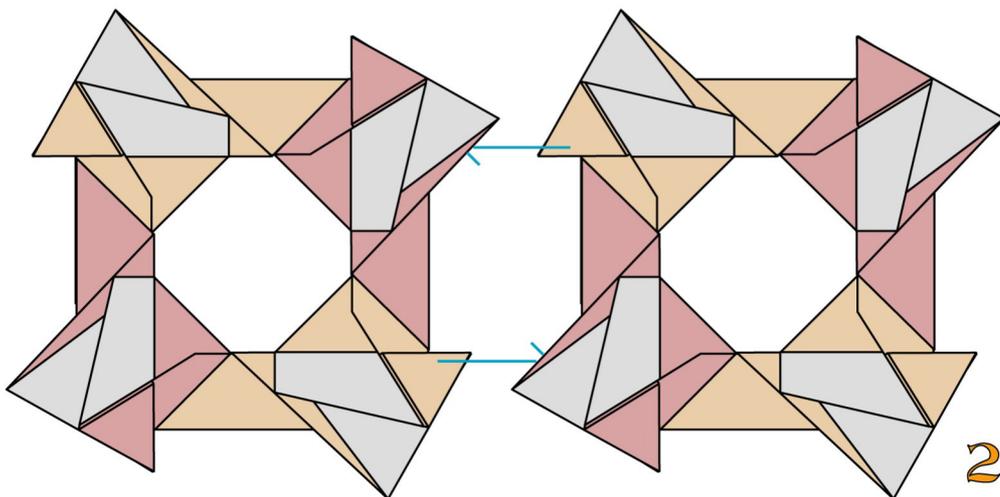


14

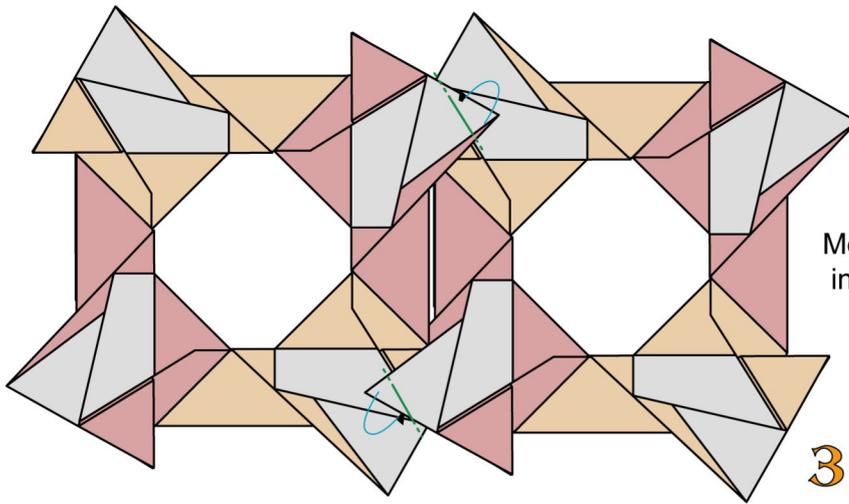
## UNIONE DEI MODULI



Modulo composto: inserite vicendevolmente un modulo nell'altro

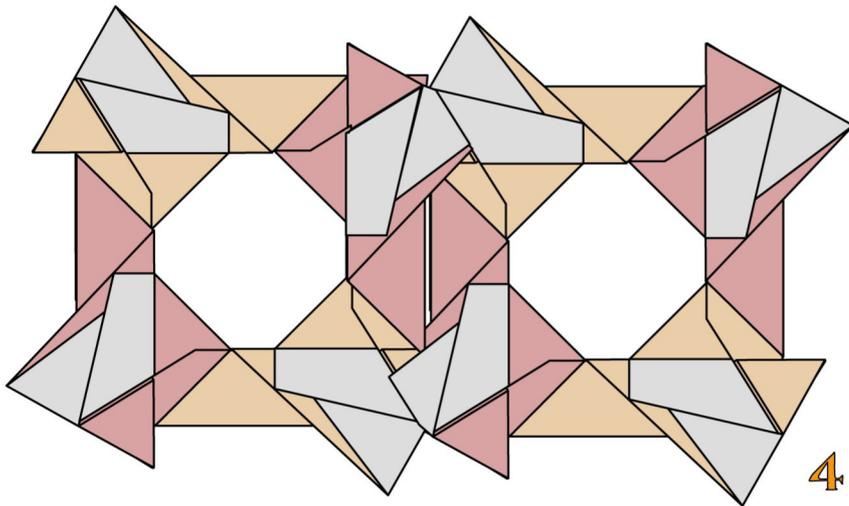


Inserite un modulo composto nell'altro



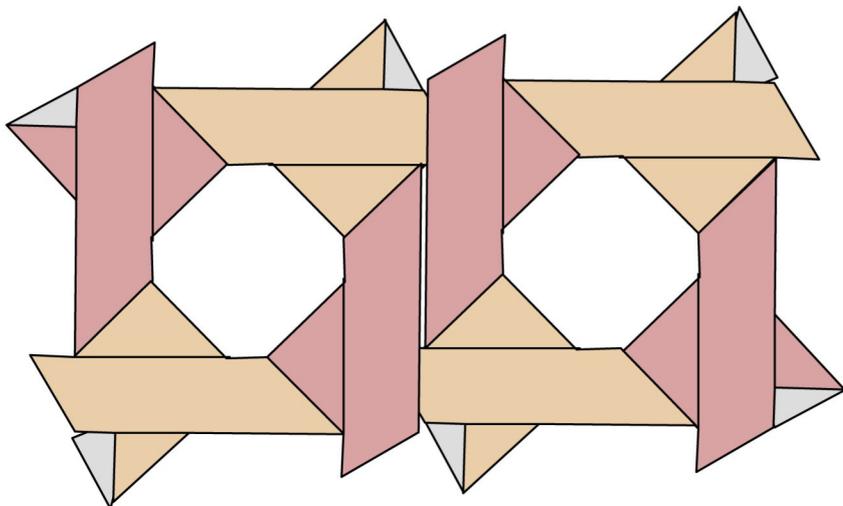
Mediante 2 pieghe a monte  
intascate e bloccate l'unione

3



Unione completata.  
Ribaltate

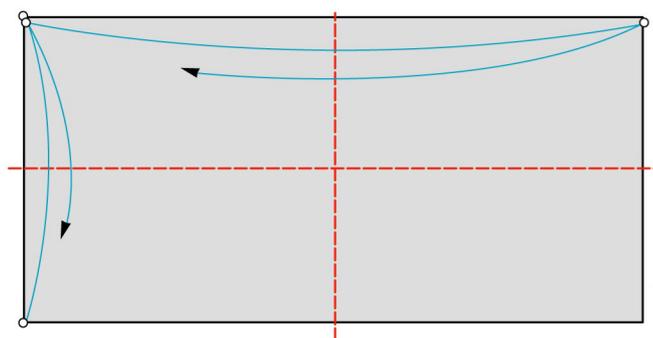
4



# TASSELLAZIONE "C" MODULARE COMPATTA

**Franco Pavarin 24**

Questa tassellazione è formata dall'unione di più moduli composti.  
Ogni modulo composto è formato unendo 3 foglietti di carta monocolori pesanti delle  
dimensioni di cm 7,5x15



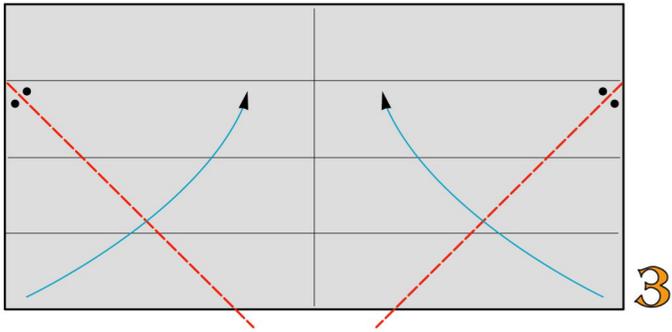
2 pieghe a valle

1

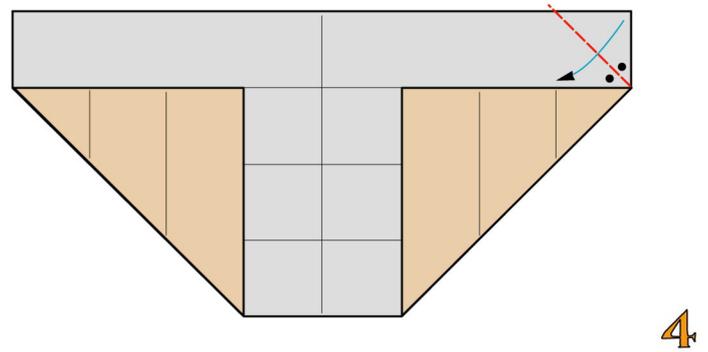


2 pieghe a valle

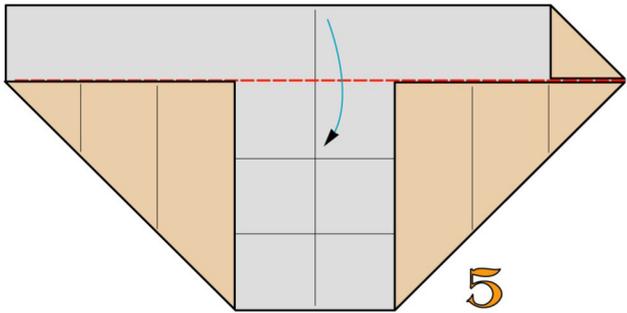
2



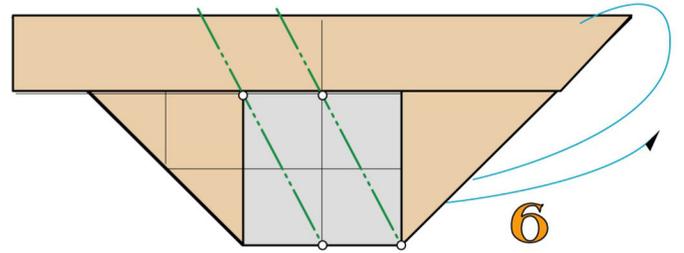
1 piega bisettrice a valle



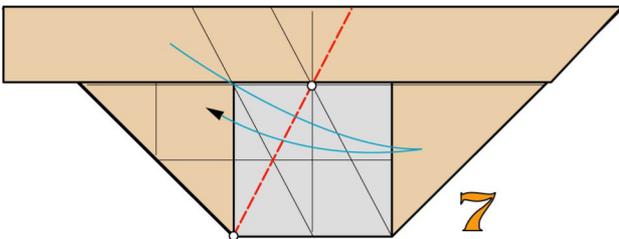
2 pieghe bisettrici a valle



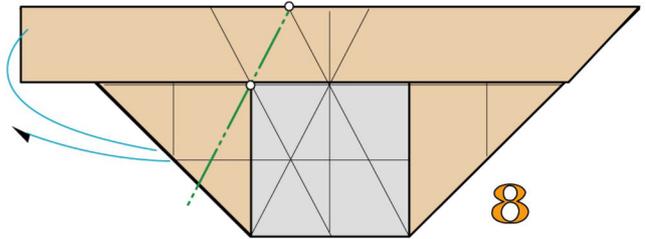
Ripiegate a valle



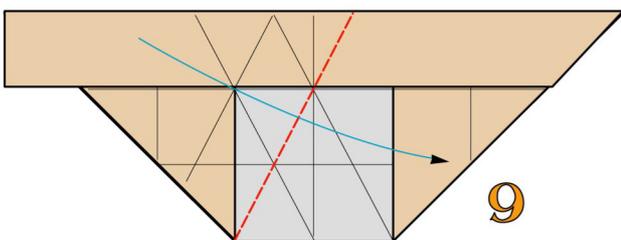
2 pieghe a monte



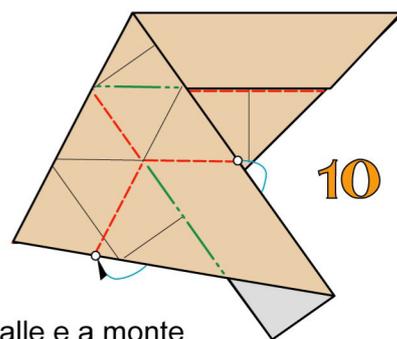
1 piega a valle



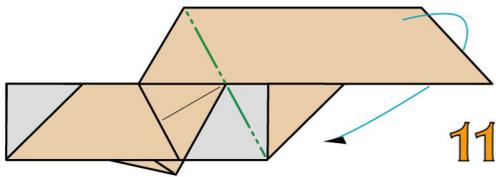
1 piega a monte



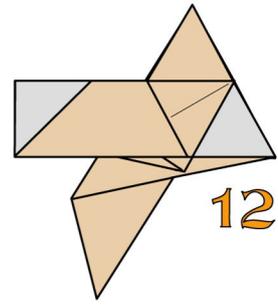
Ripiegate a valle



Ripiegate a valle e a monte

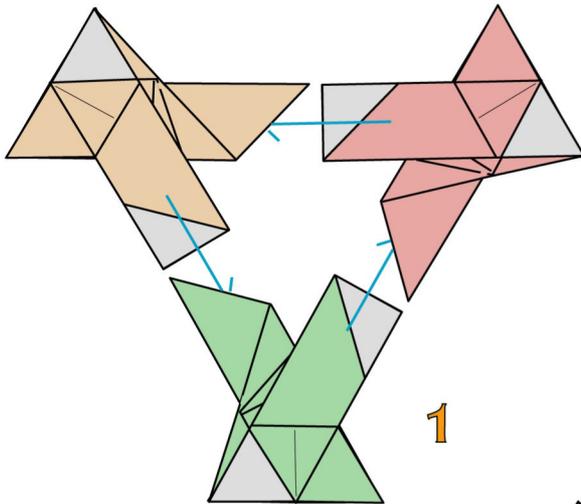


Ripiegate a monte

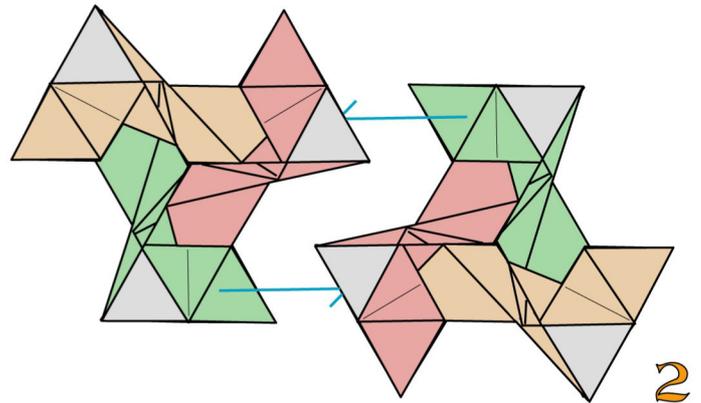


Modulo per tassellazione "C" ultimato

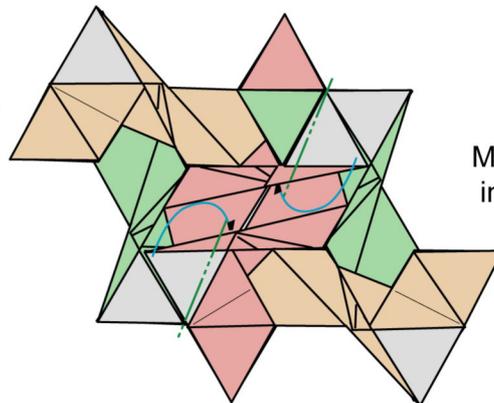
UNIONE DEI MODULI



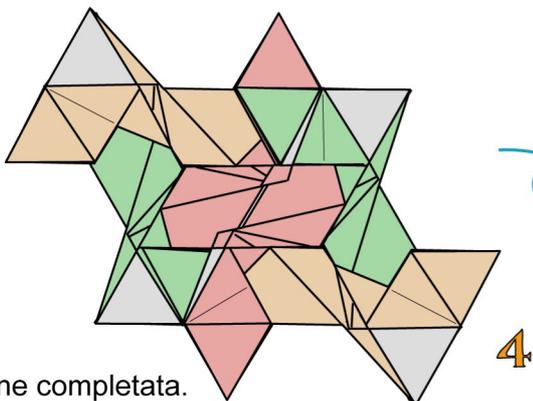
Modulo composto: inserite vicendevolmente un modulo nell'altro



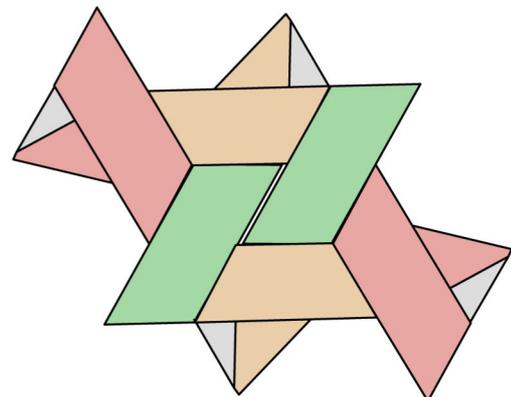
Inserite un modulo composto nell'altro



Mediante 2 pieghe a monte intascate e bloccate l'unione



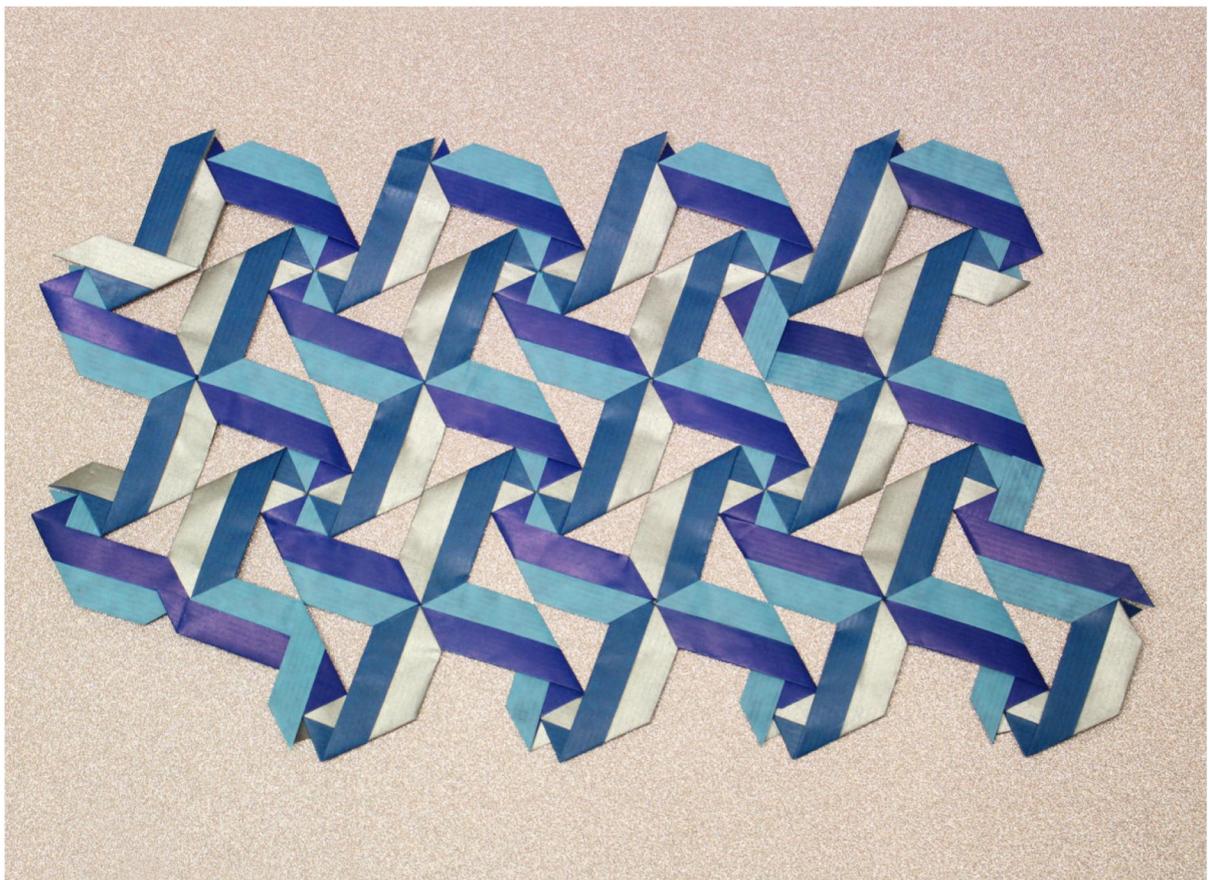
Unione completata. Ribaltate



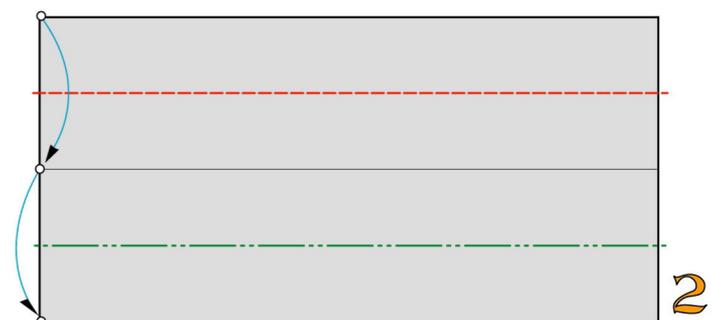
# TASSELLAZIONE "D" MODULARE TRAFORATA

**Franco Pavarin 24**

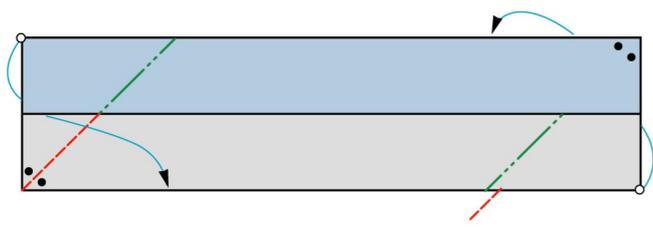
Questa tassellazione è formata dall'unione di più moduli composti.  
Ogni modulo composto è formato unendo 4 foglietti di carta bicolore leggera delle  
dimensioni di cm 7,5x15



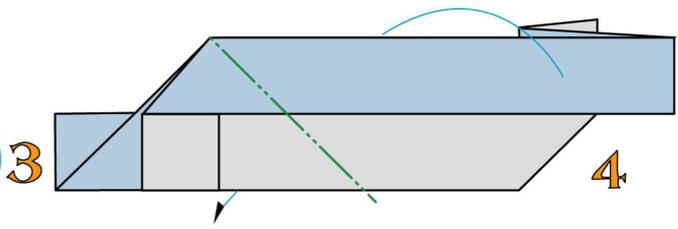
1 piega a valle



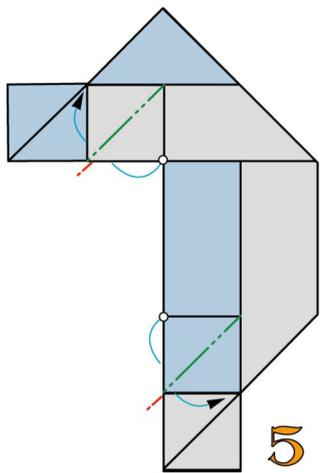
2 pieghe a valle



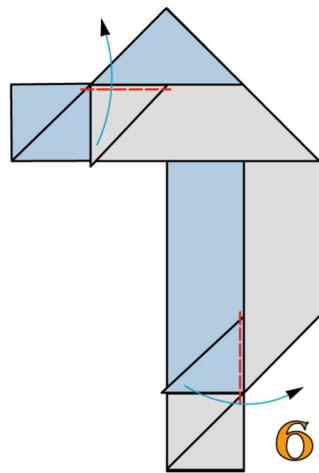
2 pieghe rovesce interne



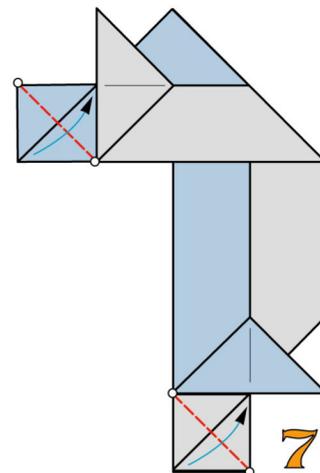
1 piega a monte



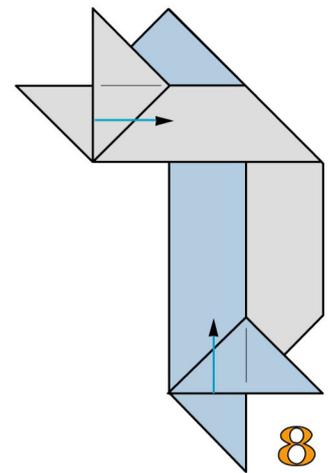
2 pieghe a monte



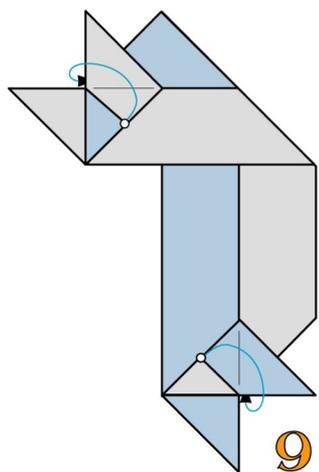
2 pieghe a valle



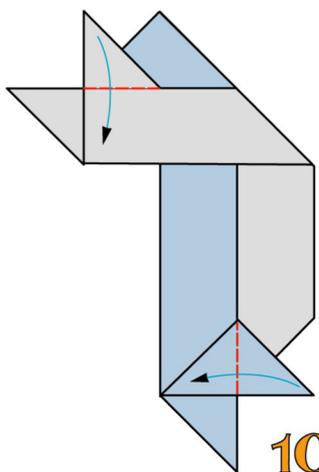
2 pieghe diagonali a valle



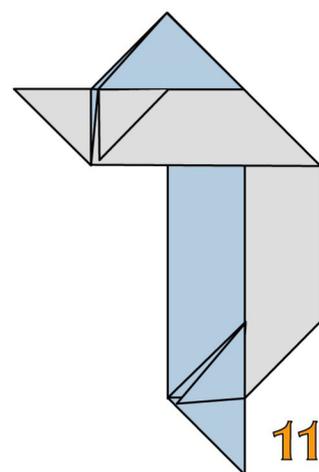
Estraete le 2 superfici interne



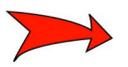
Intascate i 2 triangoli



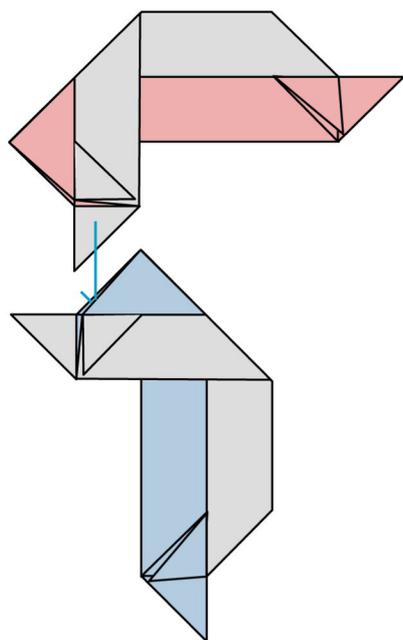
Ripiegate 2 volte a valle



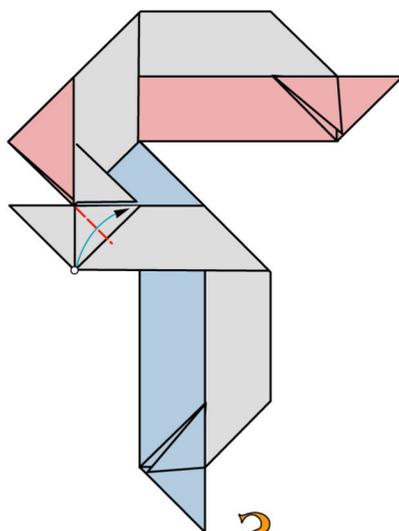
Modulo per tassellazione "D" ultimato



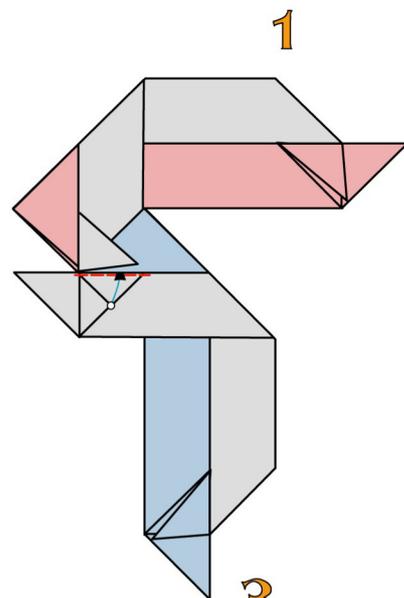
## UNIONE DEI MODULI



Inserite un modulo nell'altro

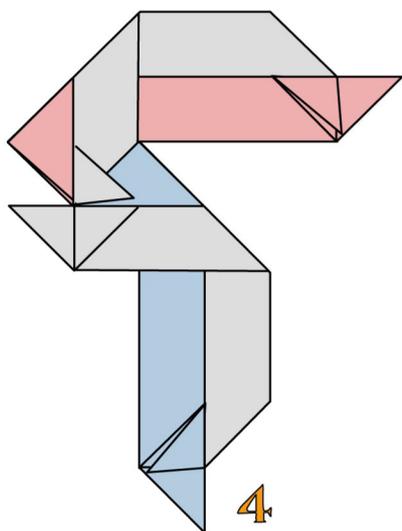


1 piega a valle

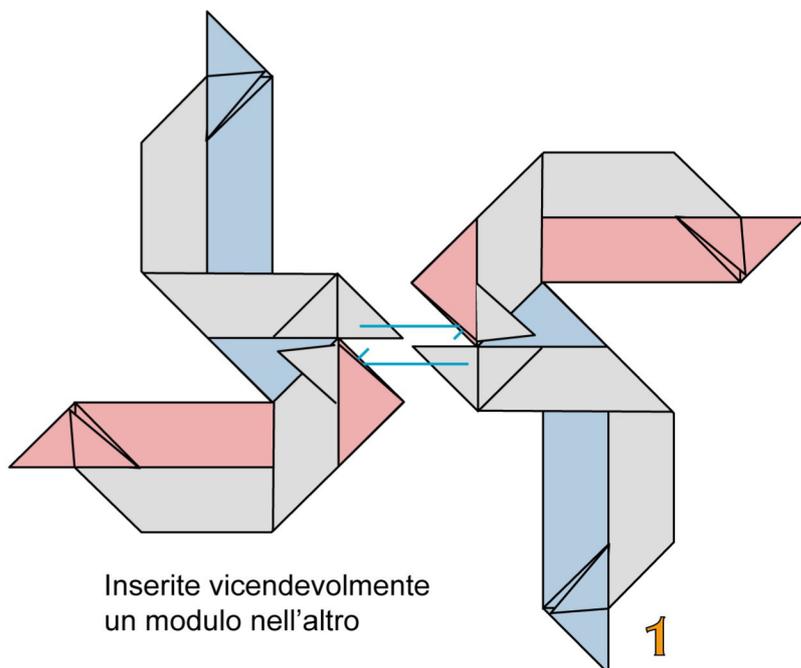


Bloccate l'unione intascando il triangolo indicato

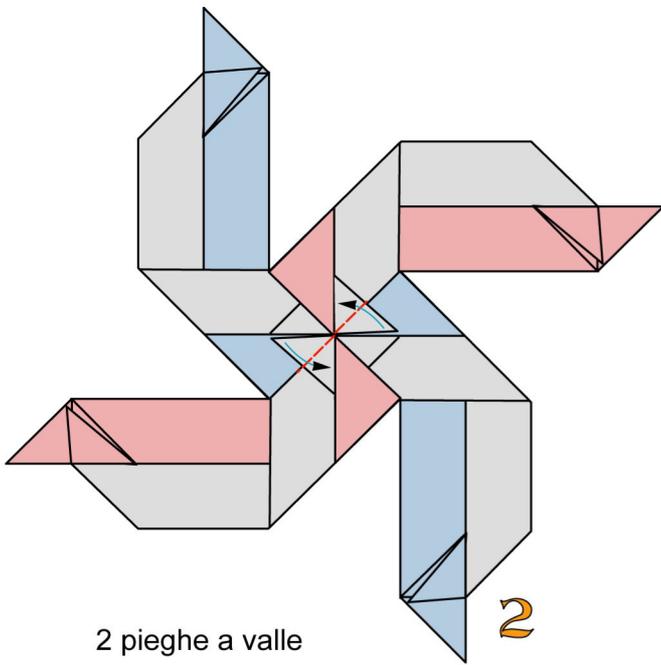
## UNIONE DI 4 MODULI PER FORMARE UN MODULO COMPOSTO



2 moduli uniti

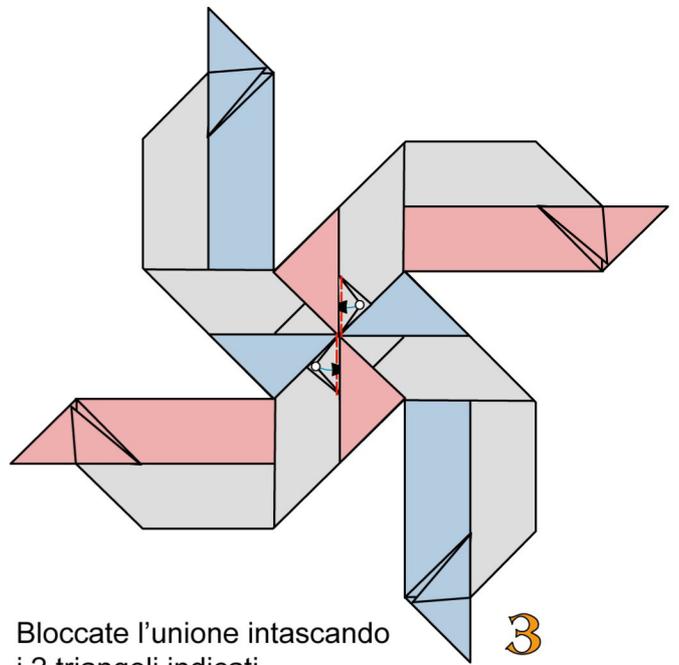


Inserite vicendevolmente un modulo nell'altro



2 pieghe a valle

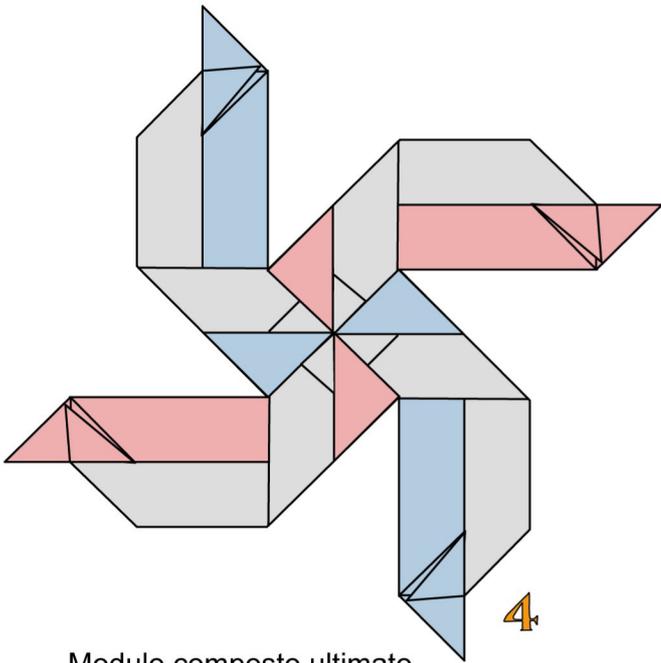
2



Bloccate l'unione intascando i 2 triangoli indicati

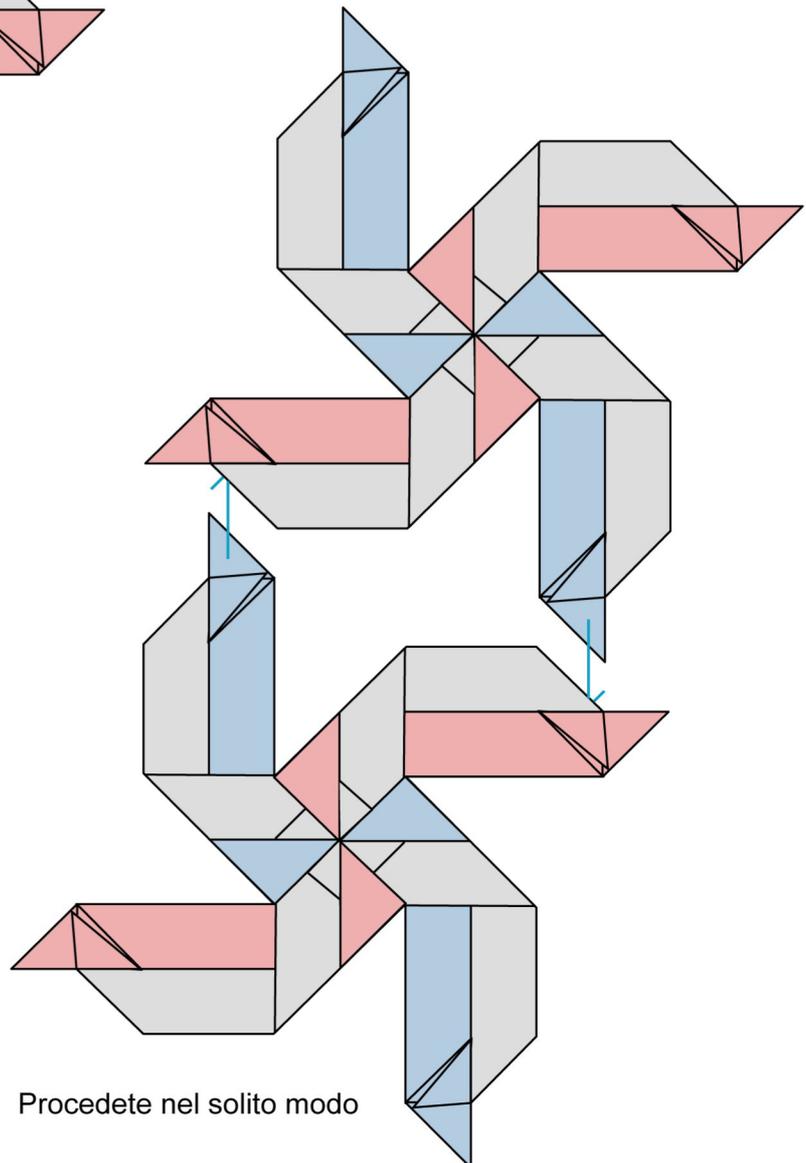
3

UNIONE DI 2 MODULI COMPOSTI



Modulo composto ultimato

4



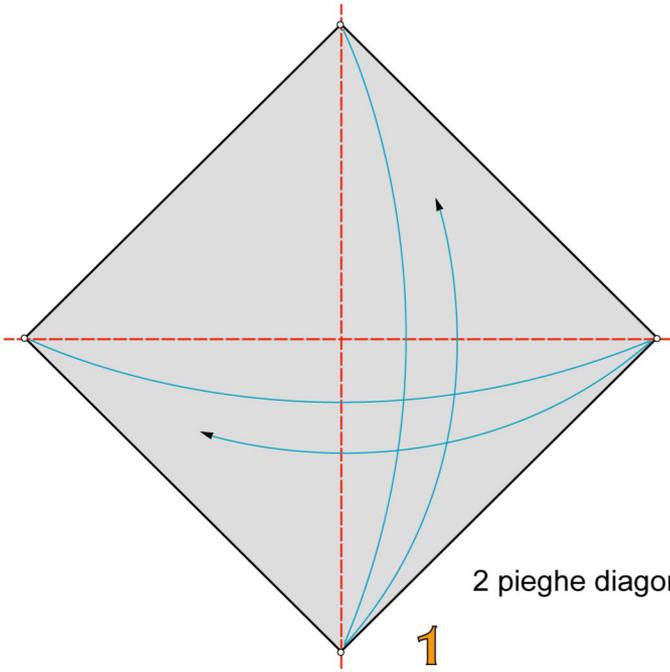
Procedete nel solito modo

# TASSELLAZIONE "E" MODULARE TRAFORATA

**Franco Pavarin 24**

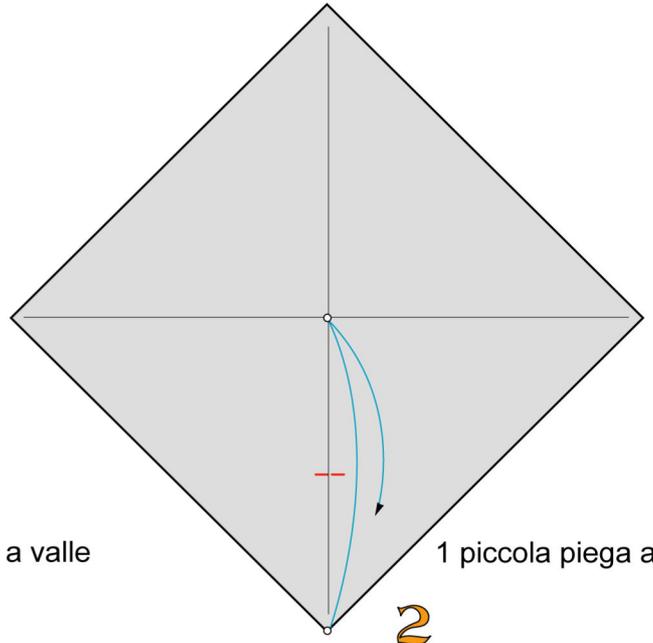
Adoperate fogli bicolori leggeri delle dimensioni di cm 7,5x7,5





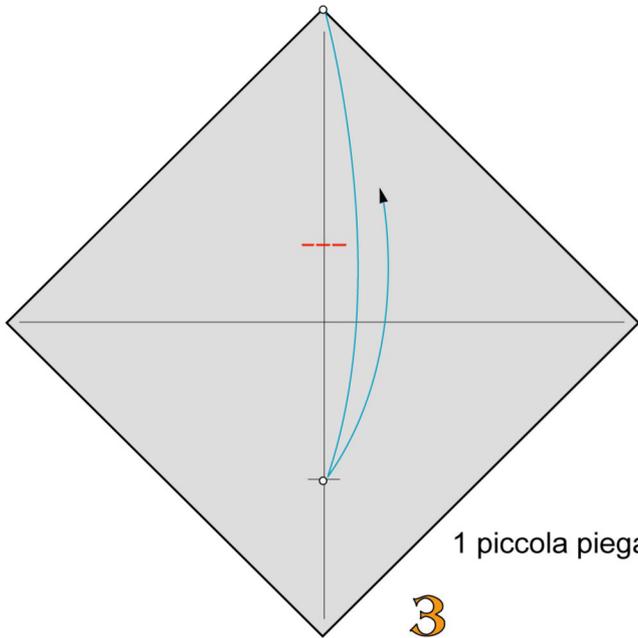
2 pieghe diagonali a valle

1



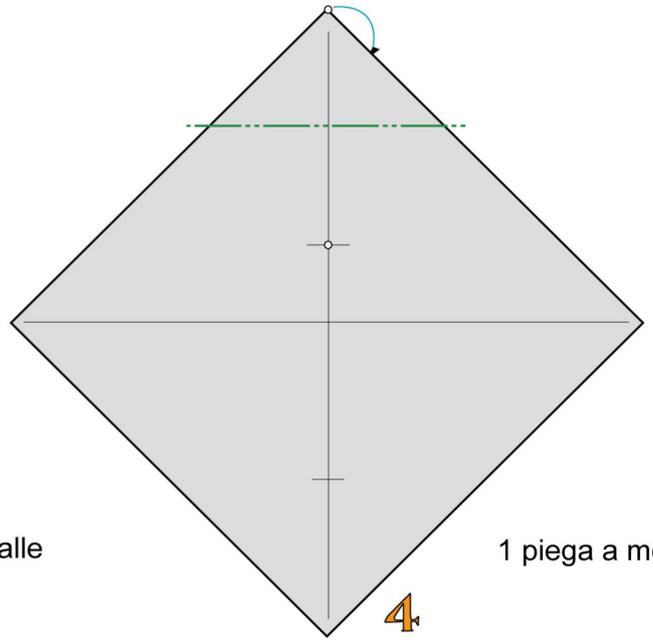
1 piccola piega a valle

2



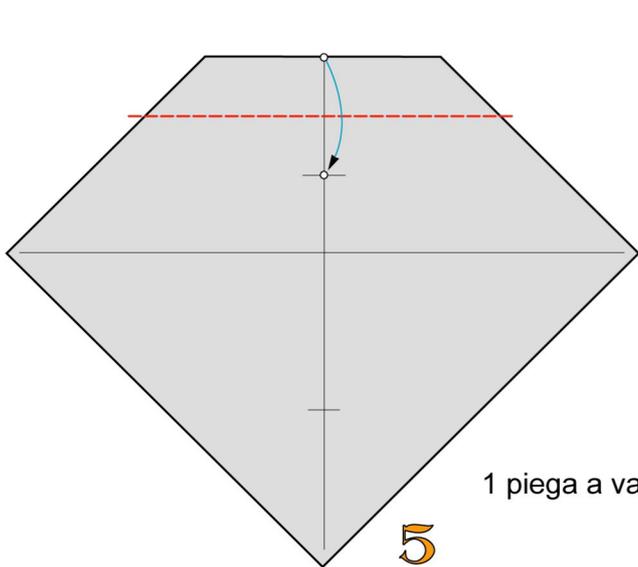
1 piccola piega a valle

3



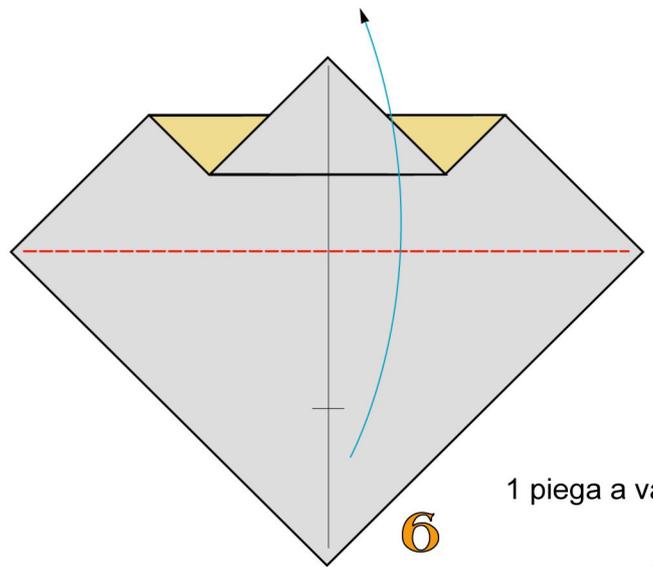
1 piega a monte

4



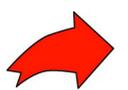
1 piega a valle

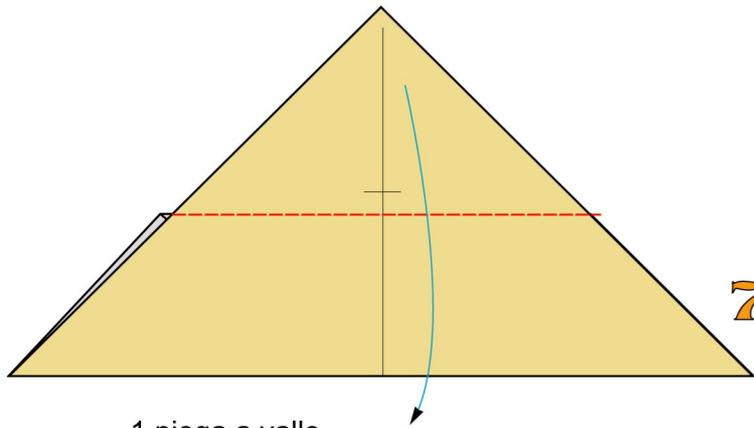
5



1 piega a valle

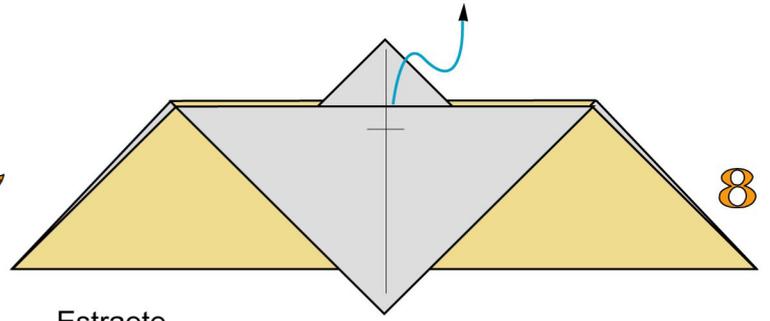
6





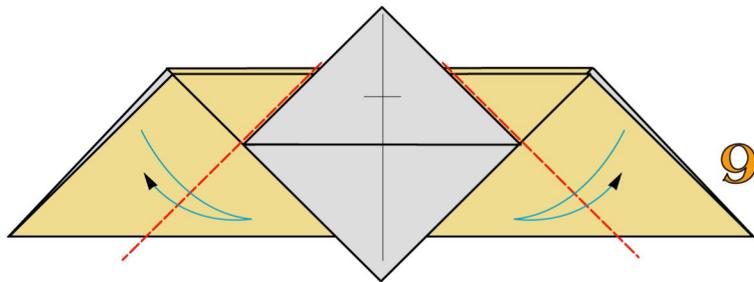
1 piega a valle

7



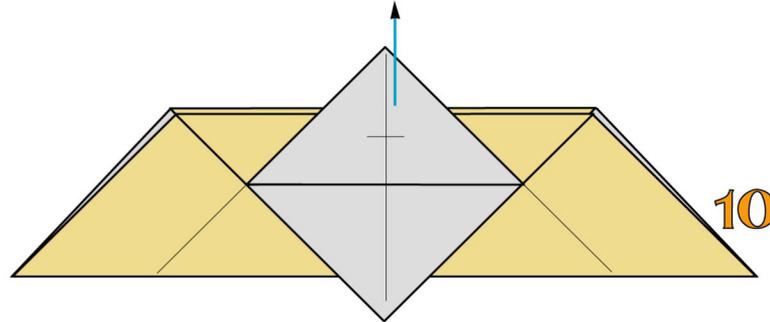
Estraete

8



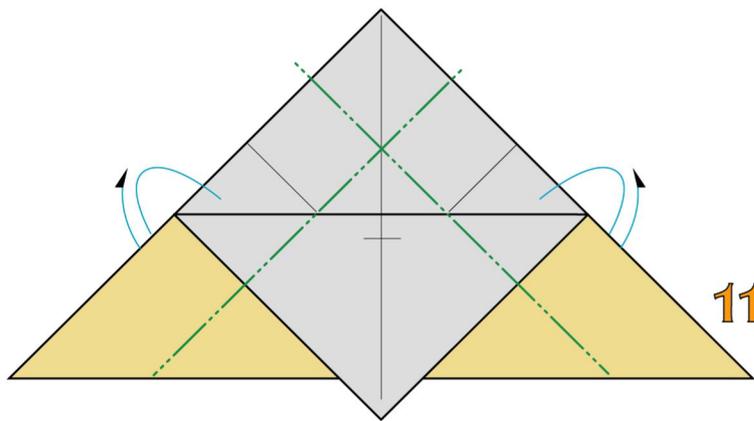
2 pieghe a valle

9



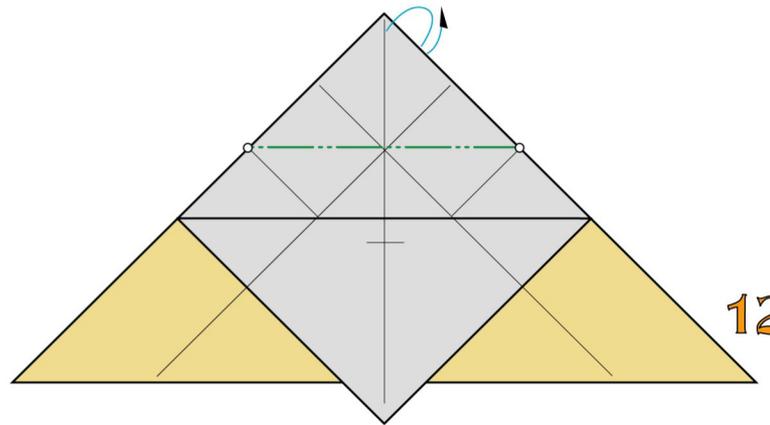
Aprite

10



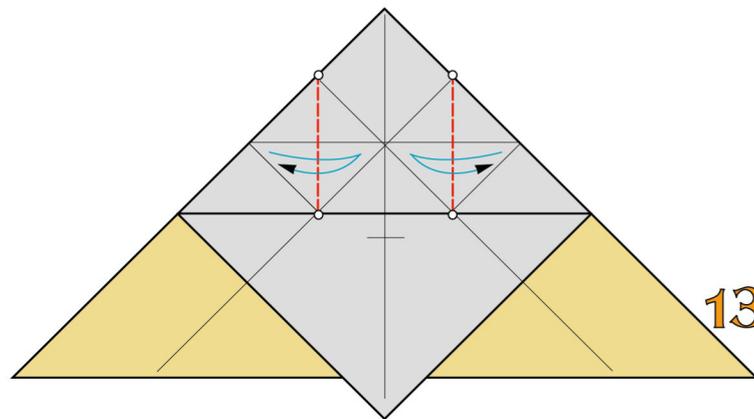
2 pieghe a monte

11



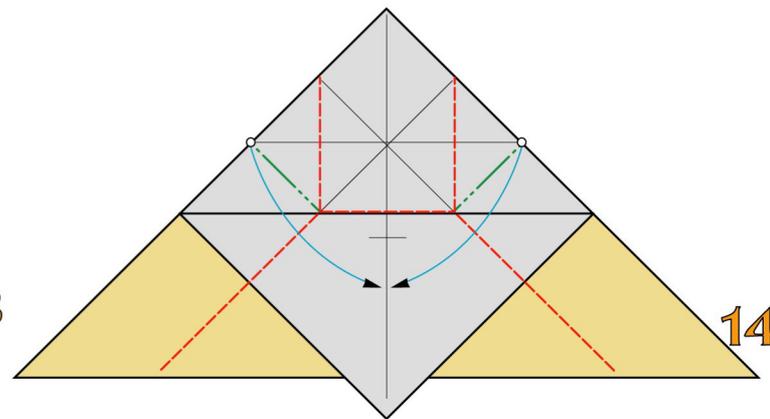
1 piega a monte

12



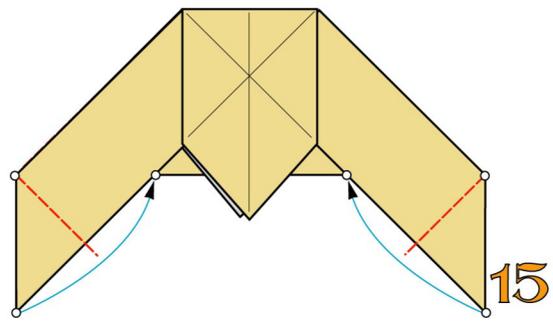
2 pieghe diagonali a valle

13

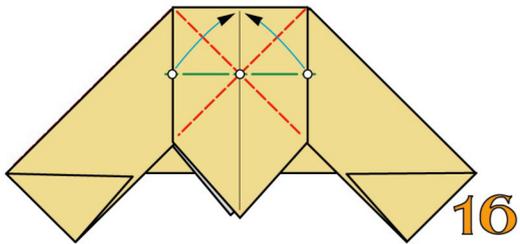


Ripiegate a valle a monte

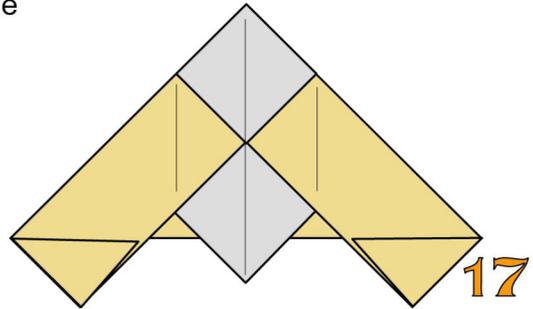
14



2 pieghe a valle

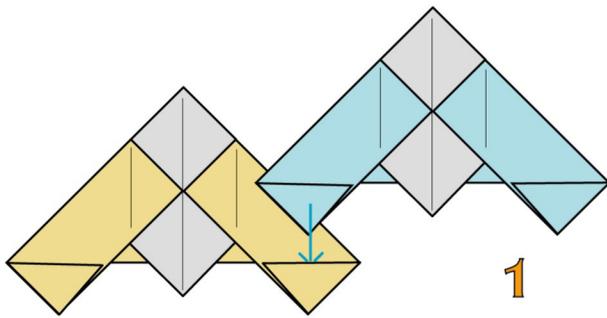


Ripiegate a valle a monte

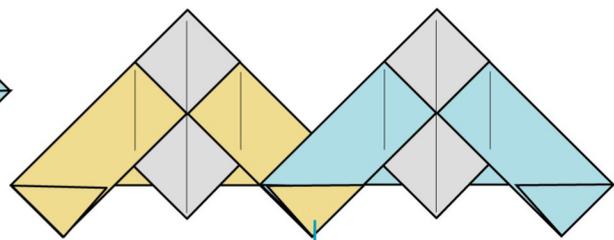


Modulo per tassellazioni "E"

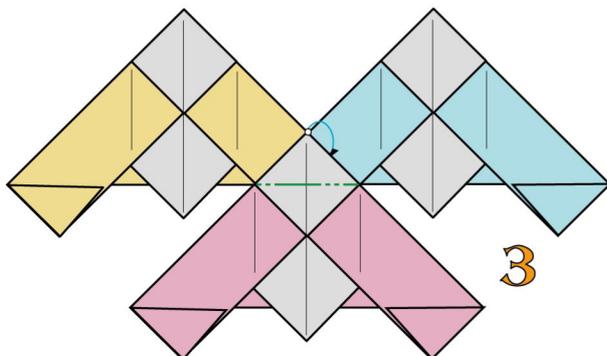
### UNIONE DEI MODULI



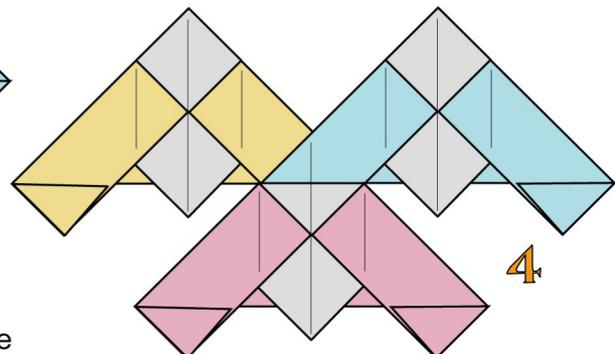
Inserite un modulo nell'altro



Intascate entro un nuovo modulo



Mediante 1 piega a monte bloccate l'unione

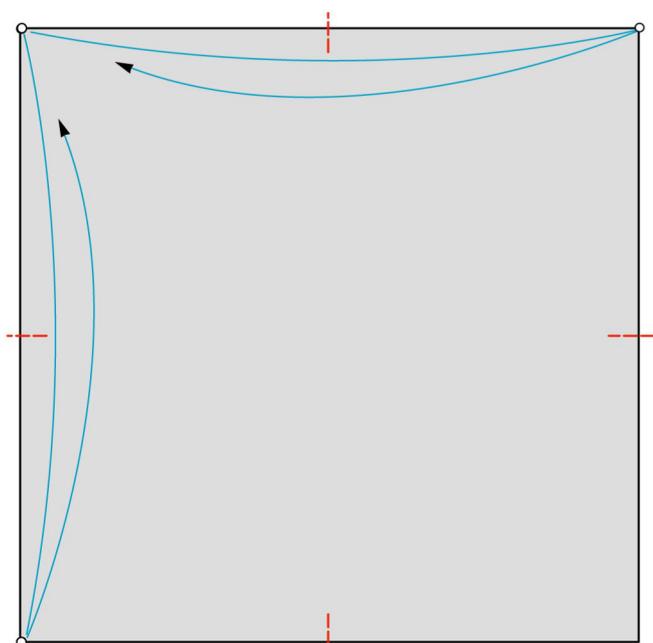
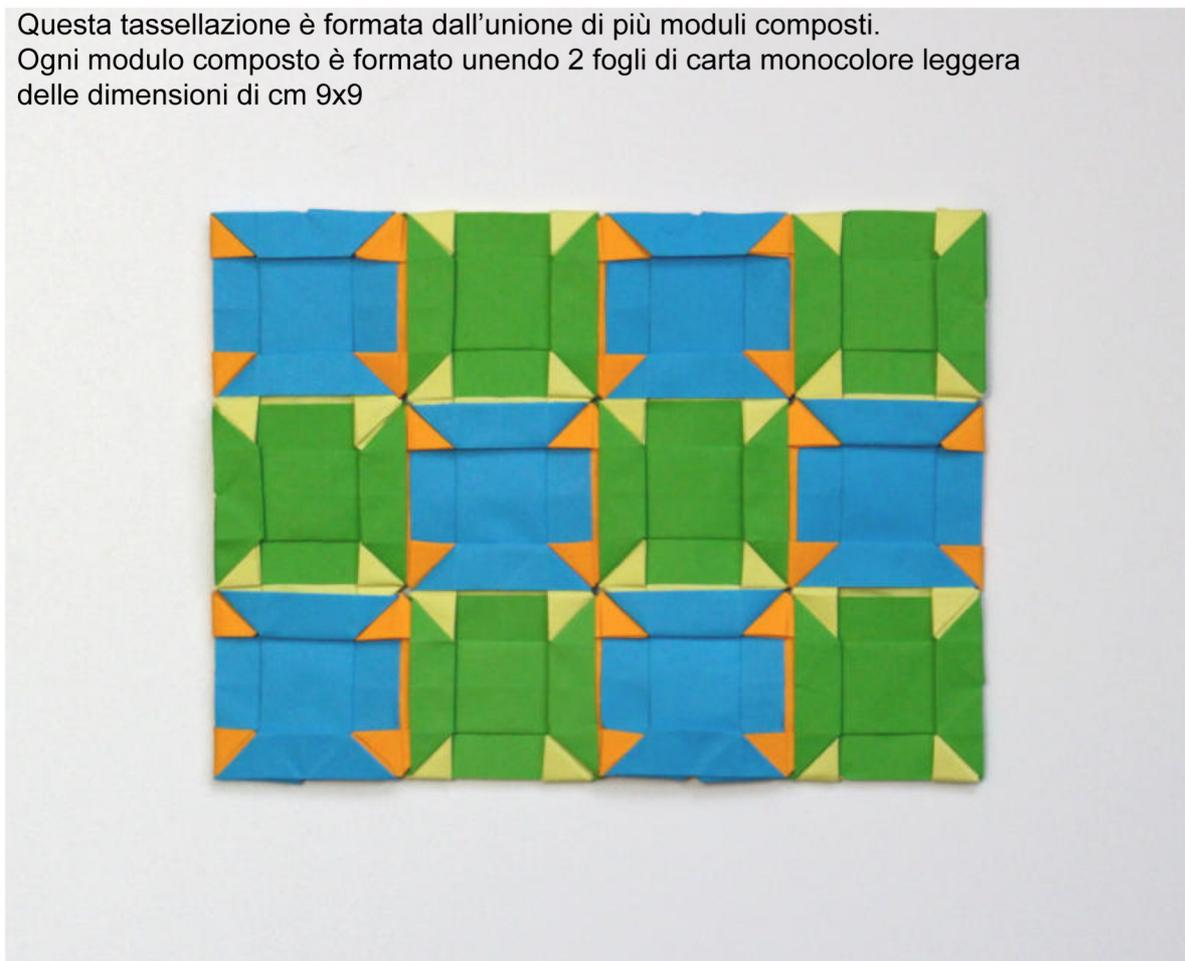


3 moduli uniti

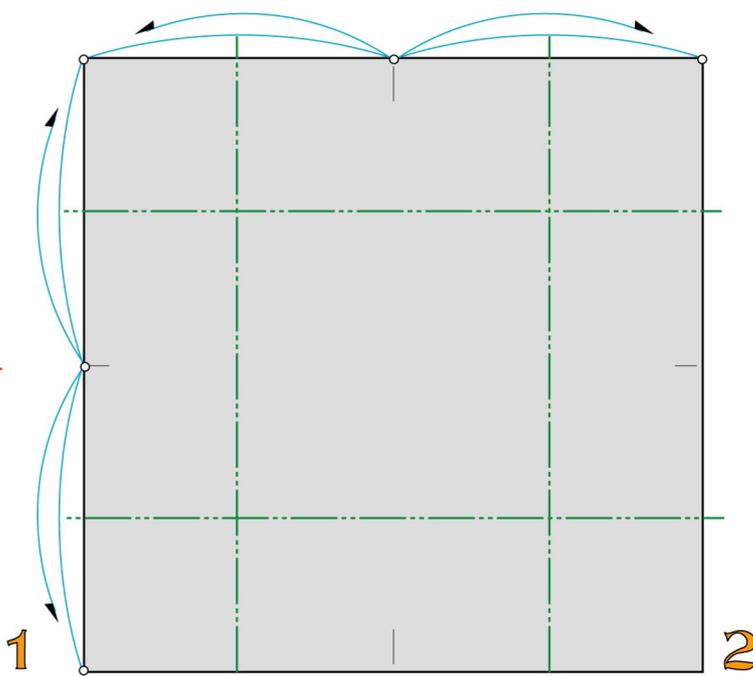
# TASSELLAZIONE "F" MODULARE COMPATTA

**Franco Pavarin 24**

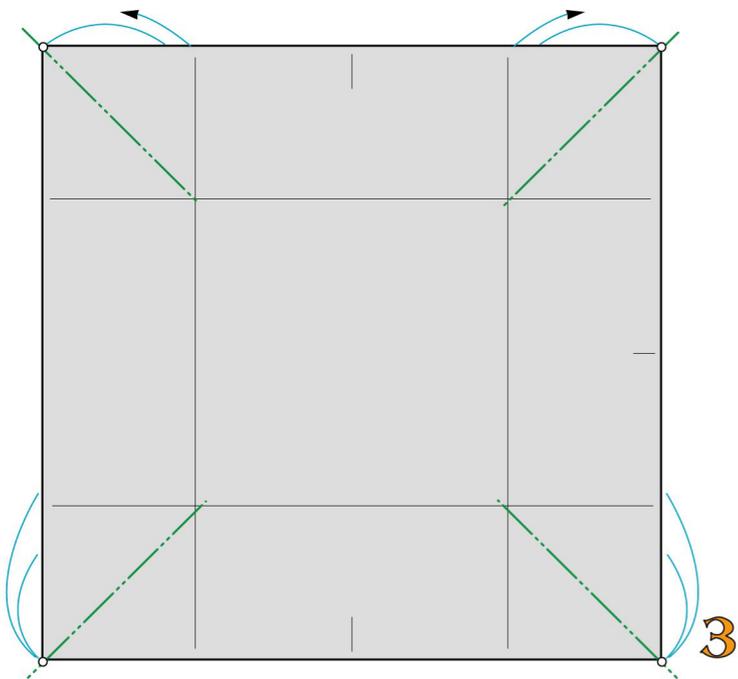
Questa tassellazione è formata dall'unione di più moduli composti.  
Ogni modulo composto è formato unendo 2 fogli di carta monocoloro leggera  
delle dimensioni di cm 9x9



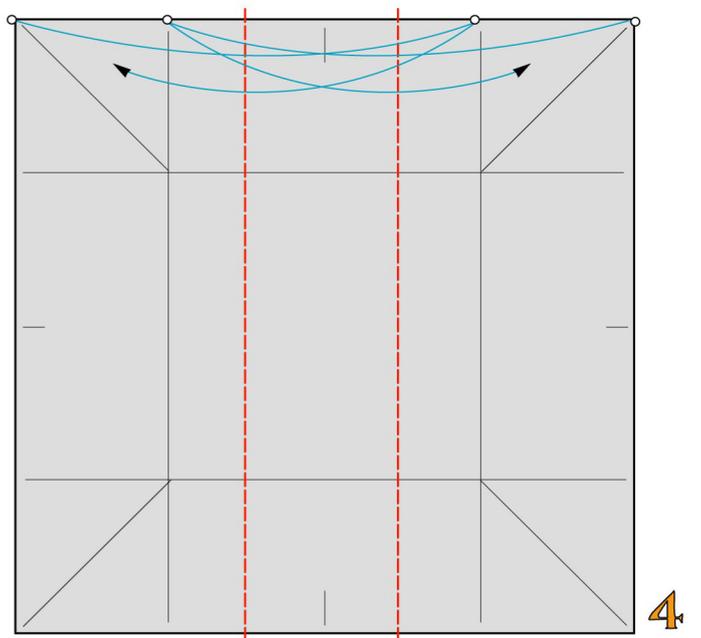
4 piccole pieghe a valle



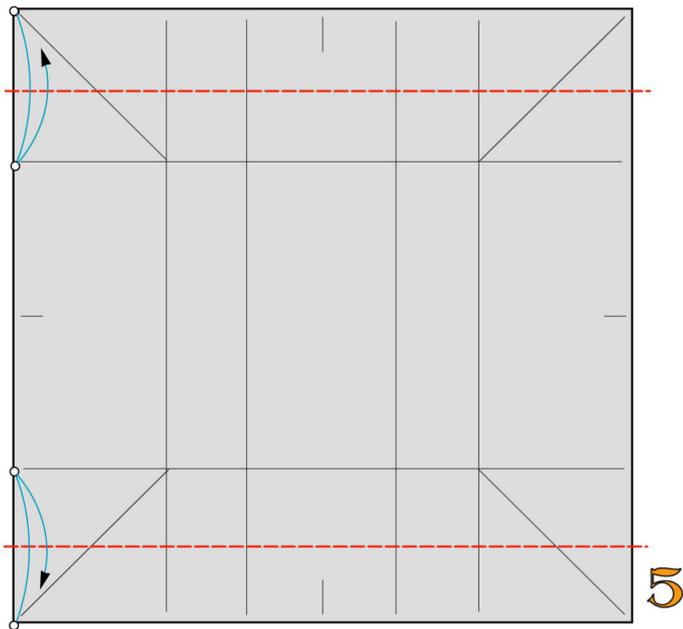
4 pieghe a monte



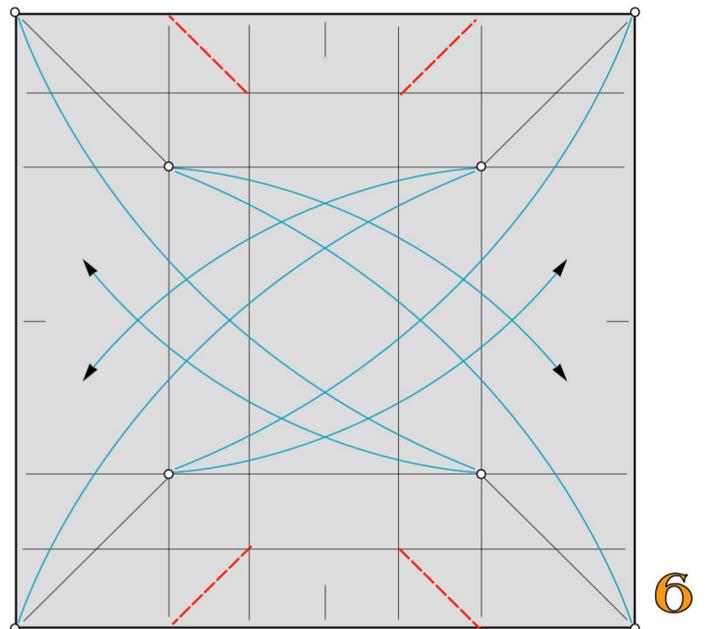
4 pieghe diagonali a monte



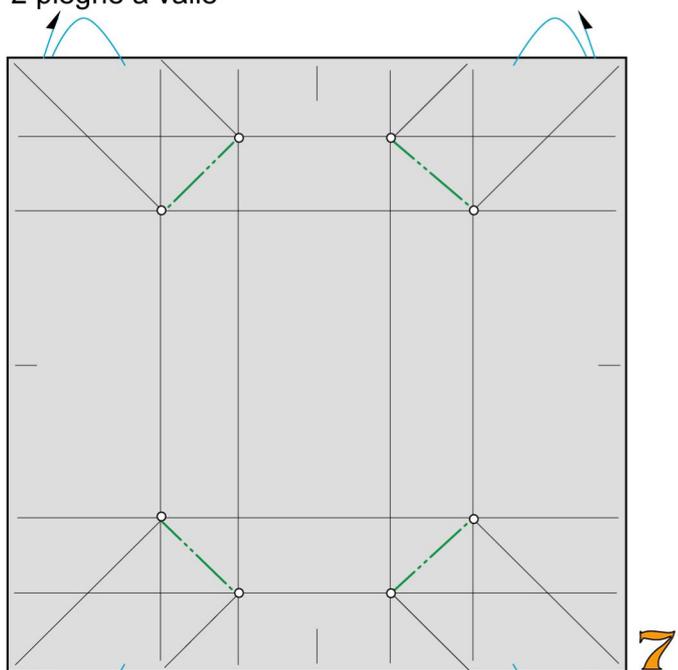
2 pieghe a valle



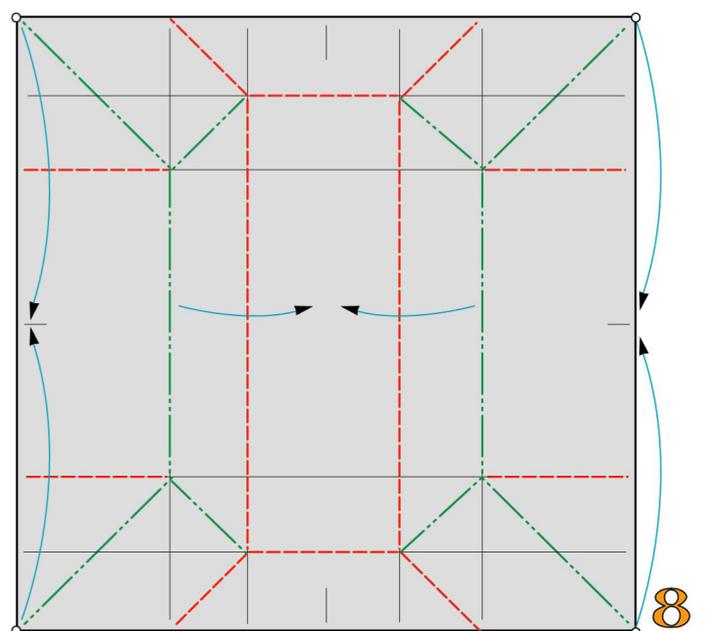
2 pieghe a valle



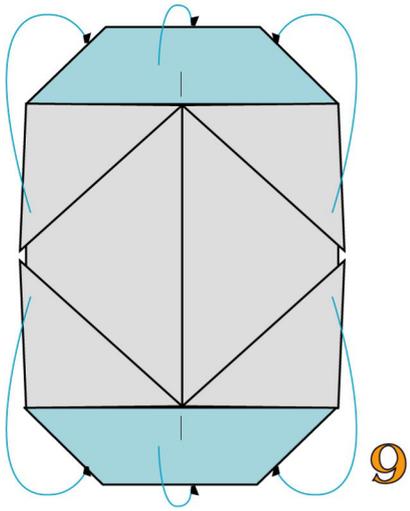
4 pieghe diagonali a valle



4 pieghe diagonali a monte

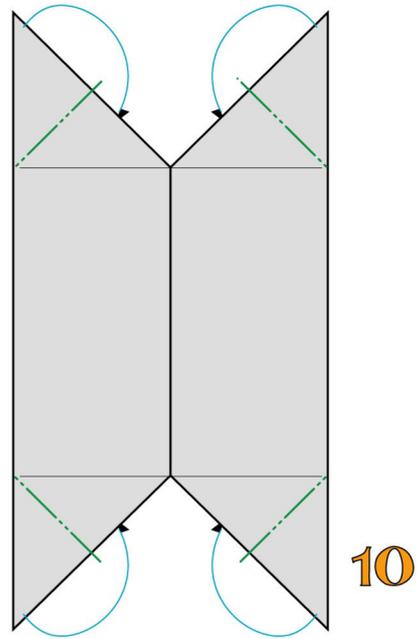


Ripiegate a valle e a monte



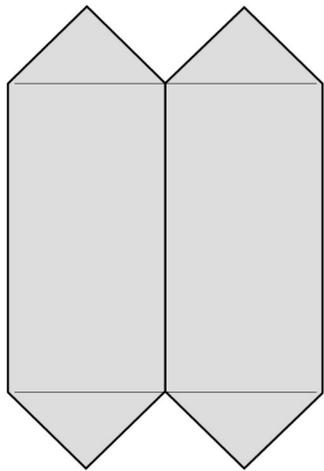
Ruotate

9



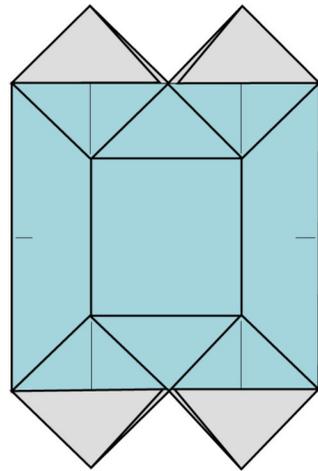
4 pieghe a monte

10



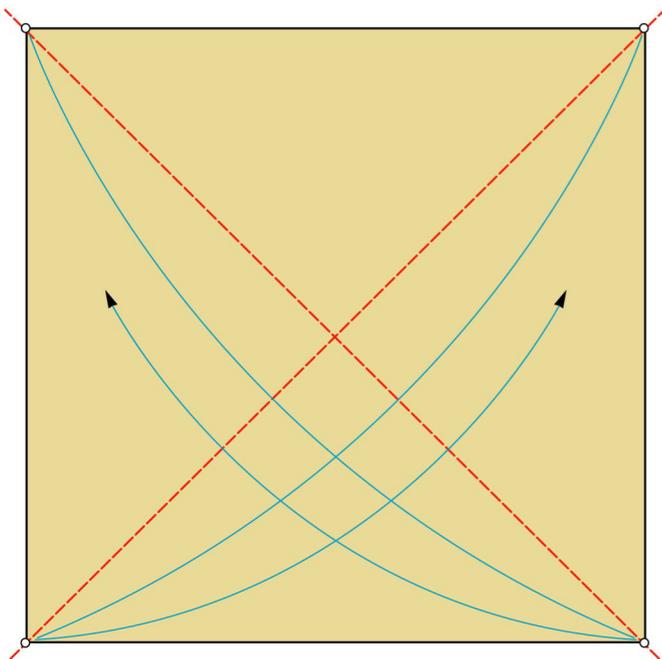
Ribaltate

11



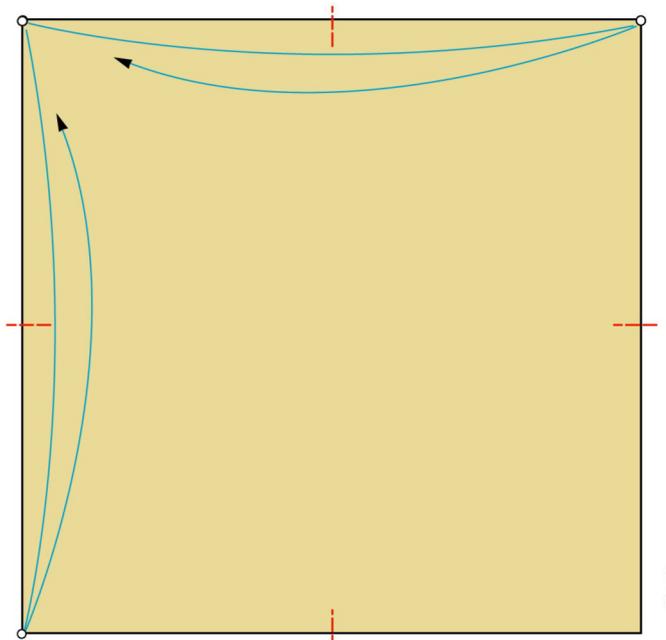
Modulo "Fa" ultimato

12



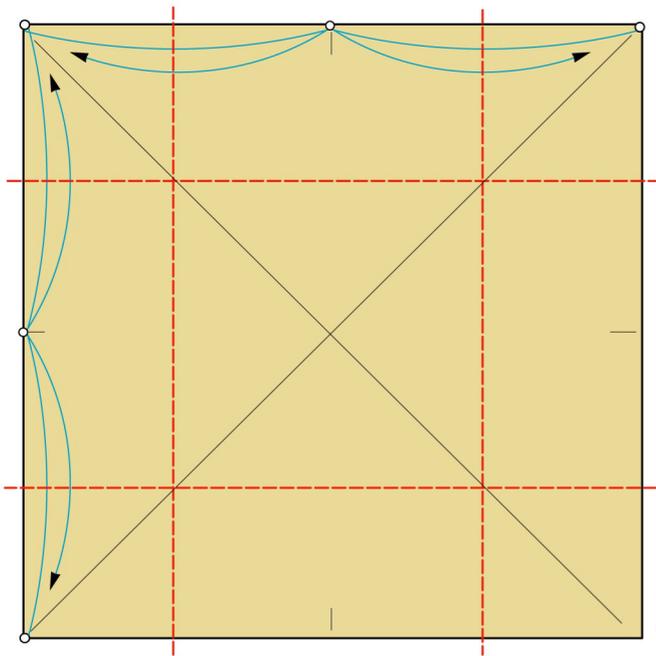
2 pieghe diagonali a valle

1

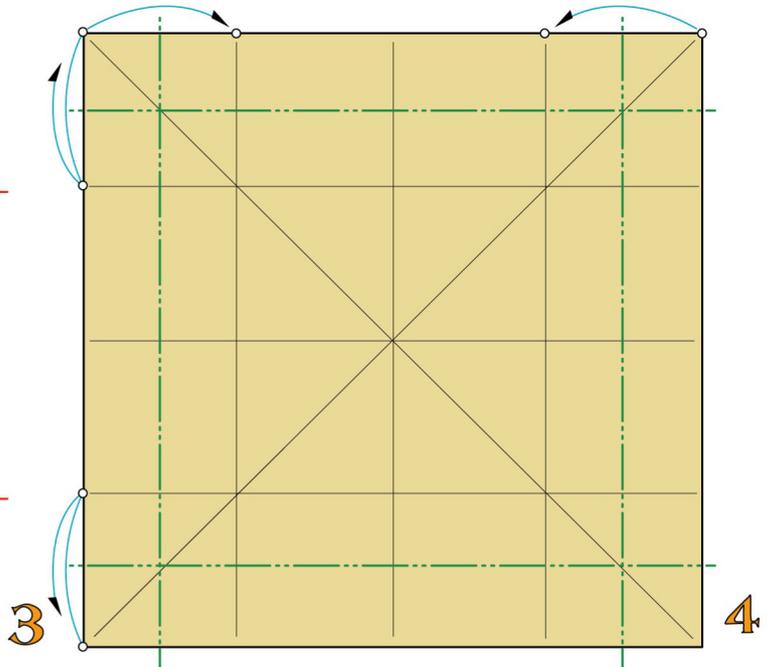


4 piccole pieghe a valle

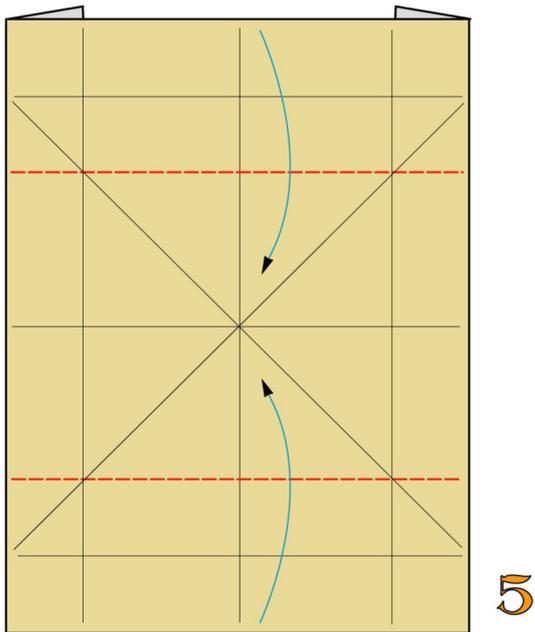
2



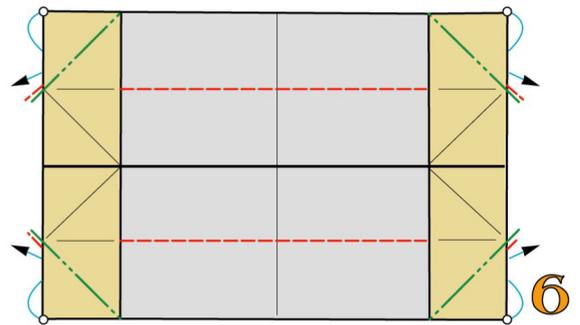
4 pieghe a valle



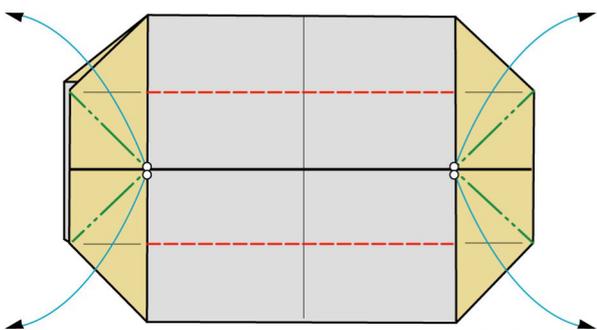
4 pieghe a monte



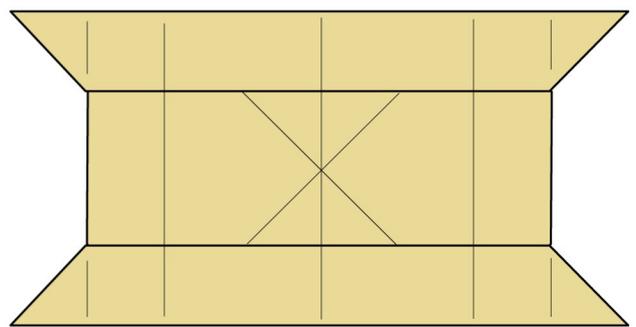
2 pieghe a valle



4 pieghe rovesce interne

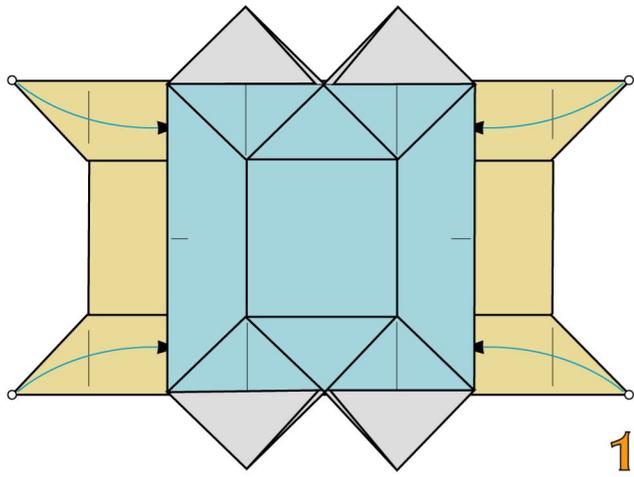


Ripiegando aperte

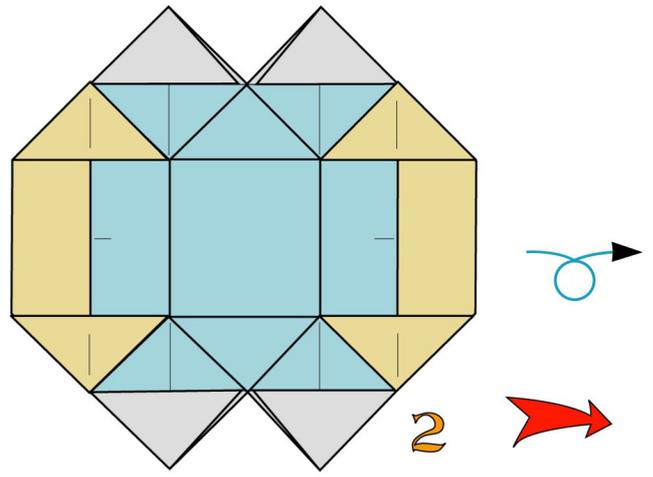


Modulo "Fb" ultimato

### MODULO COMPOSTO

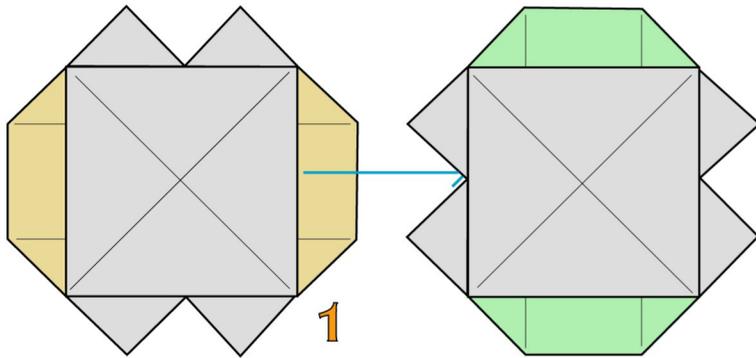


Bloccate l'unione inserendo i 4 vertici indicati nelle tasche superiori.  
Insert the vertices into the upper pockets

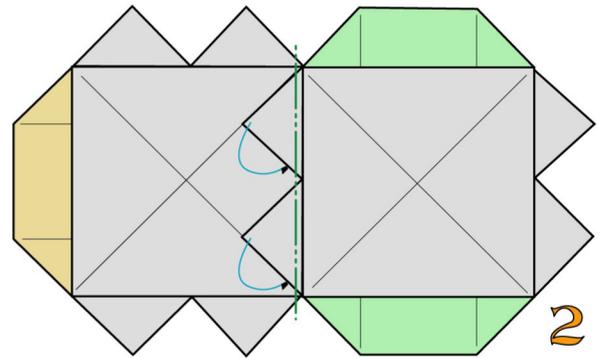


Modulo per tassellazioni "F" ultimato.  
Ribaltate

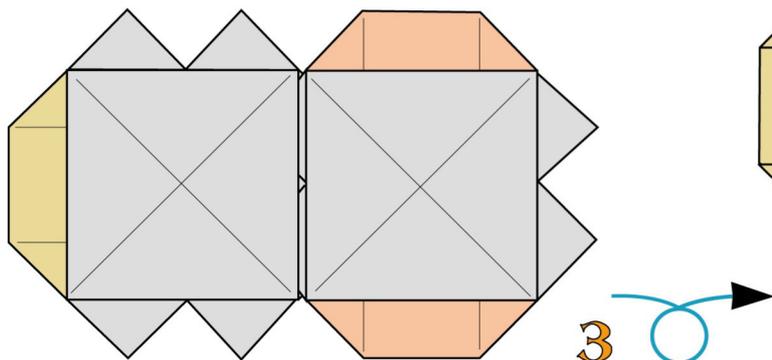
### UNIONE DI MODULI COMPOSTI



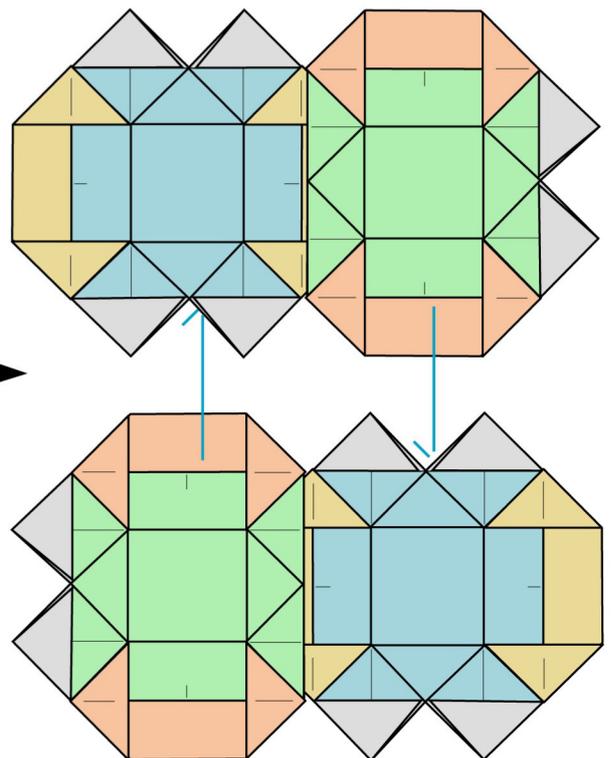
Inserite un modulo nell'altro



1 piega a valle e intascando bloccate l'unione



Unione di 2 moduli composti "F" completata



Aggiungete e bloccate altri moduli nel solito modo

## PUBBLICAZIONI DI FRANCO PAVARIN

Aerei , jet ed astronavi di carta volanti	IL CASTELLO	1986
Origami animati	"	1987
Origami maschere animate	"	1988
Decorazioni modulari con origami modulati	"	1989
Origami motoscafi navi barche e velieri	"	1990
Origami scatole e contenitori	"	1990
Pieghe forme e colori	"	1994
Aerei e navi di carta	FABBRI	1996
Fold and fly Paper airplanes	STERLING PUBLISHING	1998
Manuale rapido di aerei di carta volanti	FABBRI	2000
Aerei di carta 17 modelli volanti inediti	IL CASTELLO	2001
Aviones voladores	TUTOR S.A.	2003
17 modelos ineditos de aviones voladores	"	2004
Naves voladoras	"	2006
Quaderni Quadrato magico n.20 e 48	CDO	
Maschere, elmi e copricapi	web	2010
Maschere trasformabili	web	2011
21 nuovi aerei origami volanti	web	2014
Maschere origami 3D volume 1	web	2014
Maschere origami 3D volume 2	web	2015
Legorigami 1 -Q.Quadrato Magico n.56	CDO	2015
Composizione modulare 1	web	2016
Manuale dell'architetto origamista	web	2016
13 moduli origami aggregabili	web	2017
Alfabeti origami	web	2018
21 Elmi e strani copricapi origami	web	2019
Animaletti semplici origami	web	2020
Origami per giocare	web	2020
30 nuovi origami volanti	web	2021
Contenitori 1	web	2021
Contenitori 2	web	2021
Contenitori 3	web	2022
Contenitori 4	web	2022
Volti scolpiti origami 1	web	2018
Volti scolpiti origami 2	web	2019
Contenitori 5	web	2022

Manuale di arredamento	web	2022
Composizione modulare 2	web	2023
Castelli e fortezze componibili	web	2023
Contenitori origami 6	web	2023
Navi, barche e velieri	web	2023
Composizione modulare 3	web	2023
Composizione modulare 4	web	2024

