高职高专英语规划教材



建筑工程及艺术设计类

ON CONSTRUCTION ENGINEERING & ART DESIGN

❤️ 谷素华/主编 ❤️

河北人民出版社

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前 言

教育部高等教育司颁布的《高职高专教育英语课程教学基本要求》中明确指出: "在完成《基本要求》规定的教学任务后,应结合专业,开设英语课程,这既可保证学生在校期间英语学习的连续性,又可使他们所学的英语得到实际的应用。"本教材按照高级应用型人才培养的总体目标要求,坚持以"应用为目的,实用为主,够用为度"的原则,以"为专业服务"为宗旨,结合高职高专院校学生所学专业设计编写,帮助学生以后更好地与专业英语学习衔接,力求为学生提供较为通俗易懂又接近专业知识的阅读文章,拓宽知识面,提高学生的阅读、翻译、写作等能力。

本教材主要供建筑工程、艺术、动画等相关专业使用。

本教材由 10 个单元组成,每个单元包括阅读、翻译技巧和实用写作三部分。

第一部分阅读 (Reading),旨在培养学生阅读能力。本部分收入两篇文章,每篇文章后均配有适量的阅读和翻译练习。

第二部分翻译技巧 (Translation Skills), 旨在培养学生的翻译能力。本部分提供了翻译技巧, 遵照循序渐进的原则, 从词、短语、句子等方面掌握翻译的基本技巧。

第三部分实用写作 (Practical Writing),旨在培养学生的实用写作能力。内容涉及合同文件及信函的写作、合同协议书、业主招标、投标函、中标通知书、询价函、供货商的报价函、定购意向函开工通知、竣工检验通知、签发优质竣工证书、索赔等内容。每个单元都配有实用的句型供学生在实用写作中套用,力求做到"学中用、用中学"。

本教材实用性强,尤其突出了建筑工程及艺术动画专业特点;选材新颖、点面结合、内容丰富、语言规范;练习的设计兼具实用性和针对性。为了便于教学,各单元每一部分均附有生词和注释,书后还附有总词汇表和各专业常用词汇表及行业常用术语。

本教材一二单元由陶莉编写,三单元由范文静编写,四单元由李莉莉编写,五六单元由薛燕编写,七八单元由谷素华编写,九十单元由宁玉洁编写。

在编写过程中,我们参阅了大量的国内外出版物,广泛听取了校内外教学专家、专业教师和学生的意见,在此一并向他们表示衷心地感谢。

由于作者水平有限,书中难免有不妥之处,敬请广大读者予以指正。

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Unit 1 Architecture Styles

Part I Reading

Passage A The Greatest Architecture of the Past 1,000 Years

What are the most significant, most beautiful, or most interesting buildings of the past 1, 000 years? Some art historians choose the Taj Mahal, while others prefer the soaring skyscrapers of the 20th century. There is no single correct answer. Perhaps the most innovative buildings are not grand monuments, but obscure homes and temples. In this quick list, we'll take a whirlwind tour through time, visiting some of the most popular buildings and a few forgotten treasures.

1. St. Denis Church in Saint-Denis (1137)



During the middle ages, builders were discovering that stone could carry far greater weight than ever imagined. Cathedrals could soar to dazzling heights, yet create the illusion of lace-like delicacy. The Church of St. Denis, commissioned by Abbot Suger of St. Denis, was one of the first large buildings to use a new vertical style known as Gothic. The church became a model for

most of the late 12th century French cathedrals, including Chartres.

2. Chartres Cathedral Reconstruction (1205–1260)

In 1194, the original Romanesque Chartres Cathedral in Chartres, France was destroyed by fire. Reconstructed in the years 1205 to 1260, the new Chartres Cathedral was built in the new Gothic style. Innovations in the cathedral's construction set the standard for 13th century architecture.



3. The Forbidden City, Beijing (1406-1420)



Occupying a rectangular area of more than 720,000 square meters, the Forbidden City was the imperial home of 24 emperors of the Ming (1368 — 1644) and Qing (1644—1911) dynasties. The Forbidden City is one of the largest and best-preserved palace complexes in the world.

There are over a million rare and valuable objects in the Museum.

• 1 •

4. The Louvre, Paris (1546 and Later)

In the late 1500s, Pierre Lescot designed a new wing for the Louvre and popularized ideas of pure classical architecture in France. Lescot's design laid the foundation for the development of the Louvre over the next 300 years. In 1985, architect Ieoh Ming Pei stirred great controversy when he designed the stark glass pyramid entrance to the palace-turned-museum.



5. Palladio's Basilica, Italy (1549 and Later)



During the late 1500s, Italian Renaissance architect Andrea Palladio brought new appreciation for the classical ideas of ancient Rome when he transformed the town hall in Vicenza, Italy into the Basilica (Palace of Justice). Palladio gave the remodeled building two styles of

classical columns: Doric on the lower portion and Ionic on the upper portion. Palladio's later designs continued to reflect the humanist values of the Renaissance period.

6. Taj Mahal, India (1630 to 1648)

According to legend, the Mughal emperor Shah Jahan wanted to build the most beautiful mausoleum on earth to express his love for his favorite wife. Or, perhaps he was simply asserting his political power. The Taj Mahal may have been designed by Ustad Ahmad Lahori, an Indian architect of Persian descent. Persian,



Central Asian, and Islamic elements combine in the great white marble tomb. The Taj Mahal is just one of many architectural wonders in a land of majestic tombs and temples.

7. Monticello, Virginia, USA (1768 to 1782)



When the American statesman, Thomas Jefferson, designed his Virginia home, he combined the European traditions of Palladio with American domesticity. Jefferson's plan for Monticello resembles Palladio's Villa Rotunda, With a few innovations, Jefferson gave

Monticello long horizontal wings, underground service rooms, and "modern" conveniences.

8. The Eiffel Tower, Paris (1889)

The Industrial Revolution in Europe brought about a new trend: the use of

metallurgy in construction. Because of this, the engineer's role became increasingly important, in some cases melding with or rivaling that of the architect. The Eiffel Tower is the tallest building in Paris, and reigned for 40 years as the tallest in the world.

9. The Wainwright Building, St.Louis, Missouri (1890)



Louis Sullivan and Dankmar Adler redefined American architecture with the Wainwright Building in St. Louis, Missouri. Their design emphasized the underlying structure. Except for the large, deep windows, the first two storeys are unornamented. Uninterrupted piers extend through the

next seven storeys. Intertwined ornaments and small round

windows form the upper story. "Form follows function," Sullivan told the world.

10. Great Buildings of the 20th Century

During the 20th century, exciting new innovations in the world of architecture brought soaring skyscrapers and fresh new approaches to home design, to name just a few, the 77-storey Chrysler Building, the Empire State Building, and the 110-storey World Trade Center (known as the "Twin Towers" and destroyed in 2001) in New



York, Sydney Opera House in Australia, and of course Frank Lloyd Wright's improbable structure—Fallingwater.

New Words and Expressions

assert /əˈsəːt/ v. 主张,声明,维护 cathedral /kəˈθiːdrəl/ n. 大教堂 commission /kəˈmiʃən/ v. 委任,委托 controversy /ˈkəntrəvəːsi/ n. 争论,辩论;争议 column /ˈkələm/ n. 圆柱 dazzling /ˈdæzliŋ/ a. 令人赞叹不已的 delicacy /ˈdelikəsi/ n. 优美,精致 domesticity /ˌdəumesˈtisiti/ n. 本土 (特点) horizontal /ˌhəriˈzəntl/ a. 水平的;横的;卧式的 innovative /ˈinəuveitiv/ a. 创新的 imperial / imˈpiəriəl/ a. 皇帝的

intertwined /intətwaind/ a. 缠绕在一起的 lace-like /ˈleislaik/ a. 像花边一样的 model /'modl/ n. 模型; 原型; 典范 v. 制作模型; 塑造 mausoleum /mɔːsəˈliːəm/ n. 陵墓 marble /'maːbl/ n. 大理石 majestic /məˈdʒestik/ a. 庄严的, 雄伟的 metallurgy / meˈtælədʒi/ n. 冶金术; 冶金学 meld /meld/ v. 混合 obscure /əbˈskjuə/ a. 不引人注意的 ornament /ˈɔːnəmənt/ n. & v. 装饰品;装饰,修饰 popularize /ˈpəpjuləraiz/ v. 使通俗化; 普及, 推广 portion /ˈpɔːʃən/ n. 部分 pier /piə/ n. 窗间壁; 支柱 rectangular /rekˈtængjulə/ a. 矩形的, 长方形的 resemble /ri'zembl/ v. 相似,类似,像 rival /ˈraivəl/ v. 与……竞争; 比得上 reign /rein/ v. 统治;占主导地位 redefine /ˈriːdiˈfain/ v. 对······再加以解说; 重新定义 stark /staːk/a. 轮廓分明的, 显眼的 underlying /ˌʌndəˈlaiin/ a. 在下面的; 放在下面的 uninterrupted /'ʌnˌintəˈrʌptid/ a. 不间断的, 连续的 vertical /ˈvəːtikəl/ a. 垂直的; 立式的 whirlwind / hwə:lwind/a. 旋风般的,快速的 in some cases 在某些情况下 lay the foundation for 给……打下基础,为……奠定基础 take a whirlwind tour 旋风般的旅行 transform ... into 把·····转变成

Notes

- 1. St. Denis Church 圣丹尼斯教堂,是世界上第一座真正意义上完整采用了哥特式风格的教堂。该教堂于 1136 年在巴黎主教阿伯特·絮热 (Abbot Suger) 长老的主持下开始修建。
- 2. Cathedrals could soar to dazzling heights, yet create the illusion of lace-like delicacy. 「译文〕教堂能够百冲云霄,却给人留下花边般精美的错觉。
- 3. Gothic 哥特式,流行于西欧的 12 世纪到 15 世纪的一种建筑风格,特征是有尖角的 4 •

拱门, 肋形拱顶和飞拱。

- 4. Chartres Cathedral 沙特尔大教堂(法国)
- 5. Romanesque 罗马风,包含古罗马和拜占庭特色的欧洲建筑风格,该风格盛行于 11 世纪和 12 世纪,特点为厚实的墙、筒拱穹顶及相对不精细的装饰品。
- 6. Occupying a rectangular area of more than 720,000 square meters, the Forbidden City was the imperial home of 24 emperors of the Ming (1368-1644) and Qing (1644-1911) dynasties.

[译文] 紫禁城占据一个矩形区域,面积为720,000多平方米,是明朝和清朝24任皇帝的皇宫所在。

[分析]the Forbidden City 紫禁城

Ming (1368-1644) and Qing (1644-1911) dynasties 明朝和清朝

- 7. palace complex 宫殿建筑群
- 8. The Louvre 卢浮宫,位于法国巴黎市中心的塞纳河北岸(右岸)。
- 9. Pierre Lescot 皮埃尔·莱斯科, 法国建筑师。
- 10. In 1985, architect Ieoh Ming Pei stirred great controversy when he designed the stark glass pyramid entrance to the palace-turned-museum.

[译文] 1985年,当建筑师贝聿铭为这座皇宫博物馆设计了轮廓鲜明的玻璃金字塔 人口时,引起了激烈的争论。

[分析] Ieoh Ming Pei 贝聿铭,美籍华人建筑师

- 11. Palladio's Basilica 帕拉第奥的巴西利卡教堂
- 12. During the late 1500s, Italian Renaissance architect Andrea Palladio brought new appreciation for the classical ideas of ancient Rome when he transformed the town hall in Vicenza, Italy into the Basilica (Palace of Justice).

[译文] 16 世纪末期,当意大利文艺复兴时期建筑师安德烈亚·帕拉第奥将意大利维琴察的市政厅建成巴西利卡教堂(司法宫)时,引发了对古罗马经典思想的新理解。

[分析]Italian Renaissance 意大利文艺复兴

Andrea Palladio 安德烈亚·帕拉第奥(1508-1570),意大利建筑师。他常常被认为是西方最具影响力和最常被模仿的建筑师,他的创作灵感来源于古典建筑,对建筑的比例非常谨慎,而其创造的人字形建筑已经成为欧洲和美国豪华住宅和政府建筑的原型。

town hall 市政厅 Vicenza 维琴察 (意大利东北的一座城市)

Palace of Justice 司法宫

13. Palladio gave the remodeled building two styles of classical columns: Doric on the lower portion and Ionic on the upper portion.

[译文] 帕拉第奥在改建的建筑中运用了两种古典柱子:底部采用多利斯式,上部采用爱奥尼亚式。

[分析] Doric 多利斯式和 Ionic 爱奥尼亚式都是古老的希腊建筑风格。

- 14. Taj Mahal 泰姬陵,位于印度阿格拉市,由乌斯塔德・艾哈迈德・拉合里 (Ustad Ahmad Lahori),一位印度波斯后裔的建筑师设计,是莫卧儿 (Mughal) 王朝第五代皇帝沙・贾汗 (Shah Jahan, 1627-1658) 为纪念他的妻子所建的陵墓。
- 15. Thomas Jefferson 托马斯·杰斐逊 (1743-1826),第三任美国总统。他在弗吉尼亚州 (Virginia)的蒙蒂赛洛 (Monticello)建造了一座住宅,后来又对这座住宅加以扩建与改造,这座建筑在当时获得了美国最漂亮的住宅建筑的美誉。
- 16. Villa Rotunda 圆顶别墅
- 17. the Eiffel Tower (巴黎) 埃菲尔铁塔 (在塞纳河南岸)
- 18. Industrial Revolution 工业革命 (发生于 18 世纪末期英国)
- 19. Because of this, the engineer's role became increasingly important, in some cases melding with or rivaling that of the architect.
 - [译文] 出于这个原因,工程师的作用变得日益重要,在某些情况下与建筑师的作用相融合甚至超过建筑师。
- 20. Louis Sullivan 路易斯・苏利文 (1856-1924), 美国建筑师, 弗兰克・赖特之师, 芝加哥学派的代表人物之一, 主张"功能决定形式", 主要作品有芝加哥的会堂大厦、圣路易斯的 10 层温莱特大厦 (The Wainwright Building)等。
- 21. Dankmar Adler 丹克马尔·阿德勒 (1844-1900), 美国建筑师。1881 年路易斯·苏利文成为他的搭档, 直至 1895 年。搭档期间, 阿德勒专攻工程, 苏利文负责设计。
- 22. During the 20th century, exciting new innovations in the world of architecture brought soaring skyscrapers and fresh new approaches to home design, to name just a few, the 77-storey Chrysler Building, the Empire State Building, and the 110-storey World Trade Center (known as the "Twin Towers" and destroyed in 2001) in New York, Sydney Opera House in Australia, and of course Frank Lloyd Wright's improbable structure—Fallingwater.

[译文] 20世纪,世界建筑令人兴奋的种种创新带来高耸的摩天大楼和崭新的家居设计方法。仅举几例:77层的克莱斯勒大厦、帝国大厦、110层的纽约世界贸易中心(又名双子塔,2001年被摧毁)、澳大利亚的悉尼歌剧院,当然还有弗兰克·劳埃德·赖特的不大可能的建筑——流水别墅。

「分析」句中的 to name just a few 是插入语, 意为仅举几例。

Chrysler Building 克莱斯勒大厦 Empire State Building 帝国大厦

World Trade Center 世界贸易中心 Sidney Opera House 悉尼歌剧院

Frank Lloyd Wright 弗兰克・劳埃德・赖特 (1869-1959), 美国著名建筑师, 他

基于自然形式的特殊建筑风格极大地影响了现代建筑业。

Fallingwater 流水别墅,是现代建筑的杰作之一,位于美国匹兹堡市郊区的熊溪河畔,由弗兰克·劳埃德·赖特设计。

Exercises

Exe	erci	ses					
Ι.	Dec	ide w	he	ther the following statements are True (T) or False (F).			
	() 1. The Church of St. Denis, commissioned by Abbot Suger of St. Denis					
				was the first large building to use new vertical style known as Gothic.			
	()	2.	The original Gothic Chartres Cathedral in Chartres was destroyed by fire			
				and was reconstructed in the years 1205 to 1260. The new Chartres			
				Cathedral was built in Romanesque style.			
	()	3.	In the late 1500s, Pierre Lescot designed a new wing for the Louvre and			
				popularized ideas of pure neoclassical architecture in France.			
	(() 4. Persian, Central Asian, and Islamic elements combine in the great					
				white marble tomb, Taj Mahal.			
	()	5.	Thomas Jefferson's plan for Monticello resembles Palladio's Villa			
				Rotunda without any innovations.			
	(() 6. The Eiffel Tower is the tallest building in Paris, and reigned for almost					
				100 years as the tallest in the world.			
	()	7.	7. By emphasizing the underlying structure, Louis Sullivan and Lloyd			
				Wright redefined American architecture with the Wainwright Building in			
				St.Louis, Missouri.			
	()	8.	"Form follows function" was Louis Sullivan's idea about architecture.			
${\mathbb I}$.	Fil	l in tl	he	blanks with the proper words or expressions given below, changing the form			
	if 1	necess	ary	y .			
			(domesticity rival majestic resemble dazzle			
			j	innovative assert reign ornament obscure			
	1.	We	cou	ld not help being impressed by the of the lofty mountains.			
	2. She her mother in looks.						
	3. The bright morning sun him.						
	4. The meeting concerns both foreign and policies.						
	5. Technical is important in improving the qualities of products.						
	6. The hall is with Chinese paintings.						
	7. The boss his authority by punishing his employees.						
	8. She lived in many places, but she says nothing can the beauty of the						

	Rocky Mountains.		
9.	It is written by an young	g poet.	
10	. He over the country for	r ten years.	
I I. Ma	atch Column A with in Column B.		
	\mathbf{A}	В	
1.	metallurgy	a. 宫殿(建筑)群	
2.	Romanesque	b. 罗马风格的	
3.	rectangular	c. 波斯的	
4.	palace complex	d. 冶金术	
5.	wing	e. 陵墓	
6.	mausoleum	f. 文艺复兴	
7.	pier	g. 长方形, 矩形	
8.	Renaissance	h. 紫禁城	
9.	Persian	i. 支柱, 窗间壁	
10	. the Forbidden City	j. 侧翼, 厢房	
IV. Con	mplete the sentences by translating th	ne Chinese given in brackets in	to English.
1.	He designed the first suspension b	ridge, which	(把美观与功
	能完美地结合起来).		
2.	Having spent some time in the city	, he had no trouble	(找到
	去历史博物馆的路).		
	Today's efforts are bound to		
4.	Under certain conditions we can _	(把坏事变质	成好事).
5.	I have no doubts that	(它将使我们双方建立	更紧密的联系).
V. Tra	anslate the following sentences into C	Chinese.	
1.	Innovations in the cathedral's c	onstruction set the standard	d for thirteenth
	century architecture.		
2.	The Forbidden City is one of the l	argest and best-preserved pala	ace complexes in
	the world.		
3.	According to legend, the Mughal	emperor Shah Jahan wanted t	o build the most
	beautiful mausoleum on earth to e	xpress his love for his favorit	e wife.
4.	When the American statesman, T	homas Jefferson, designed his	s Virginia home,
	he combined the European traditio	ns of Palladio with American	domesticity.
5.	The Industrial Revolution in Eur	ope brought about a new tr	end: the use of
	metallurgy in construction.		

Passage B Chinese Classical Architectural Style

China is a country with a long history. On this land, our ancestors left us an abundance of splendid, time-honored architectural legacy, which has undergone thousands of years of development to become a distinct part of world architectural history. Chinese architecture refers to a style of architecture that has taken shape in East Asia over many centuries. The structural principles of Chinese architecture have remained largely unchanged, the main changes being only the decorative details. Since the Tang Dynasty, Chinese architecture has had a major influence on the architectural styles of Korea, Vietnam and Japan. Features of Chinese classical architecture are demonstrated mainly in the following aspects:

1. Wooden Structure

Chinese architecture is based mainly on wooden structures of unique charming appearance. This differs from all other architectural systems in the world which are based mainly on brick and stone structures. The complexity and delicacy of a wooden structural system, in particular, is unmatched by brick and stone structures, and therefore demonstrates the wisdom of the Chinese. The components



of ancient Chinese buildings are mainly columns, beams and purlins, which are connected by tenons and mortises. As a result, the wooden structure is quite flexible. There is also a unique design only found in China named dougong, which is one of the most important elements in traditional Chinese architecture. From the point of view of structural mechanics, the dougong structure is highly resistant to earthquakes. It could hold the wooden structure together even though brick walls would collapse in the same earthquake. This helped so many ancient buildings to stand intact for hundreds of years.

2. Collective Layout



Traditional Chinese buildings are always found in pairs or groups, whether they are residences, temples or palaces. The Siheyuan in Beijing is the typical form of residence in north China. It is a compound with houses around a square courtyard. The main house in the

courtyard is occupied by the head of the family, and the junior members live in the wings on each side. This layout not only conforms to the feudal Chinese family moral principle of distinction between the older and younger, and male and female members,

but also provides a quiet and private environment for family life. Temples and palaces also sometimes display this layout. In the Forbidden City in Beijing, there are nearly 1, 000 halls of varied sizes which are all grouped around large or small courtyards.

The structure of Chinese architecture is based on the principle of balance and symmetry. Most of the buildings strictly follow the axis-centered principle with symmetrical wings. So the buildings look symmetrical on the left and right sides. Such layout of ancient Chinese architecture has reflected the aesthetic standard of harmony and symmetry in ancient China.

3. Gorgeous Ornaments

Architects in ancient China pay special attention to the ornaments either from a whole or in a specific part. They use different colors or paintings according to the particular need or local customs. Some buildings use multiple colors to make strong contrast. Others use soft color to make it simple but elegant.

Besides the stress on the colors, ancient buildings attach the same importance to decorations, furnishings inside and ornaments outside. Carved beams, painted rafters, various patterns, inscribed boards, couplets hung on the pillars, and wall paintings are used to add to the colorful and beautiful style. Stone lions, screen walls, ornamental columns, as well as flowers are used in the outside of a building to make ornaments.



The decorations on ancient Chinese structures have cultural connotations as well as



aesthetic ones. The dragon heads on the edges of roof ridges signify the spurting of water to douse fires. Dragon, phoenix, tiger and tortoise were regarded as sacred animals by the ancient Chinese, and they carved images of them on eaves tiles which were exclusively used on imperial structures. The emperors were supposed to be descendants of dragons, so there are images of dragons all over imperial structures. Symbols

denoting happiness, wealth and longevity can be seen everywhere on traditional Chinese structures, including palaces, temples, gardens, residences, gateways, windows and roof beams. Bats represent happiness, deer stand for wealth, and pines, cranes and peaches represent longevity.

New Words and Expressions

ancestor /ˈænsistə/ n. 祖宗, 祖先

abundance /əˈbʌndəns/ n. 充裕, 丰富

aesthetic /iːsˈθetik/ a. 美学的, 艺术的

beam /biːm/ n. (建筑物等的) 横梁

complexity /kəmˈpleksiti/ n. 复杂(性),错综(性)

component /kəmˈpəunənt/ n. 成分,组成部分

collapse /kəˈlæps/ v. 倒塌

collective /kəˈlektiv/ a. 集体的, 集合的

compound /ˈkəmpaund/ n. 有围墙 (或篱笆等的) 住宅群, 大院

carve /kaːv/ v. 刻, 雕刻

couplet /'kʌplit/ n. 对联

connotation /kɔnəˈteiʃən/ n. 含义; 隐含意义; 内涵

crane /krein/ n. 鹤

demonstrate /'demonstreit/ v. 论证,证明;显示,表露

douse /daus/ v. 在……上浇水

descendant / di'sendənt/ n. 子孙, 后代

denote /di'nəut/ v. 表示;代表;指示

elegant /'eligənt/ a. 漂亮的;精致的

eaves /iːvz/ n. 屋檐, 房檐

exclusively /iksˈkluːsivli/ ad. 专门地;排外地;仅仅地

flexible /ˈfleksəbl/ a. 有弹性的, 灵活的

feudal /ˈfjuːdl/a. 封建的; 封建时代的

gorgeous /ˈgɔːdʒəs/ a. 华丽的, 绚丽的

intact /in'tækt/ a. 原封不动的,完整无损的

inscribe /inˈskraib/ v. 刻;雕; 题写

legacy /ˈlegəsi/ n. 遗产; 遗赠

layout /'leiaut/ n. 安排;设计;布局

longevity /lon'dʒeviti/ n. 长寿

mortise /ˈmɔːtis/ n. 榫眼

mechanics /miˈkæniks/ n. 力学; 机械学

purlin /'pəːlin/ n. 平行桁条

pillar /ˈpilə/ n. 柱子

resistant /riˈzistənt/ a. 抵抗的, 有抵抗力的

rafter /ˈraːftə/ n. 椽